

BOROSIL[®]

enabling the future of science

CATALOGUE



Manufacturers of Laboratory Glassware
From 3.3 Low Expansion Borosilicate Glass

LABQUEST BY BOROSIL[®]

Manufacturers of Laboratory Equipment



MISSION & VISION

Our mission is to emerge as a preferred vendor for laboratory glassware in the domestic as well as international markets. We would also develop a complimentary range of laboratory consumables in our product portfolio.

While in this wonderful journey we want to enhance our marketing capabilities, continuously improve our quality and services, invest in our people, yield profits for our stake holders and be socially responsible.



Message from the Managing Director's Desk

Dear Customer,

It gives me immense pleasure to present the catalogue of a new decade. This is also the first year when we begin operations as a demerged entity "**BOROSIL LIMITED**". The removal of "Glass Works" from the name is a step towards our vision of being the most customer centric company in India. Our goal is to supply our customers, YOU, with a wide range of laboratory products. While glass has been and will remain our core competence, we are now very happy to also have our international standard "Labquest" range of laboratory instrumentation in our product portfolio.

Our **LABQUEST** range of instruments is designed to perform beautifully. These instruments are developed to the most exacting world standards at our 'Borosil Technologies Ltd' facility in Pune. Backed up by an all India service network, our goal is to provide our customers the option of an indigenously designed and produced, value for money instrumentation range that can be used as a substitute for imported equipment without any compromise in performance or reliability.

In Glassware, we've made major investments at our factories that'll help us serve you faster, especially for customized printing requirements. Our Class A volumetric wares are now all laser etched for improved visibility and easy traceability. In addition to this, the catalogue also has a number of new glassware product introductions, most of which have been suggested by our customers themselves.

The last 10 years have been very enriching; we've learnt a lot from our customers and have done our best to serve you better. We expect to continue to do the same in the decade to come.

Thank you for all your support!

Yours truly,
Shreevar Kheruka
Managing Director

BOROSIL[®]

an ISO 9001: 2015 certified company

BOROSIL LIMITED

1101, Crescenzo, G - Block, Opp. MCA Club, Bandra Kurla Complex,
Bandra (E), Mumbai - 400 051, India.

Phone : +91-22-6740 6300 Website : www.borosil.com

BOROSIL[®]

Quality Policy

"We, at Borosil Limited, are committed to understanding our customers' needs and fulfilling the same on time every time.

By bringing the voice of our customers inside the organization, we strive to be our customers' #1 preferred brand.

We are committed to achieving the highest level of customers satisfaction through improvements in quality of our products & services.

We believe in continual improvements and innovation in our business and manufacturing processes. We strive to ensure that our team achieves the highest quality output in the most efficient manner possible.

This will be achieved by our total commitment to:

- Communication with our customers to understand their needs
- Continuously updating our technical competence, system and processes
- Enhancing the expertise of our people by periodic training & reviews.
- Preserving our corporate values"

This policy will be available to all interested parties where appropriate



Shreevar Kheruka
Managing Director

Date : 01.05.2018

welcome to **BOROSIL**[®]

State of the art
manufacturing facility at Bharuch



Corporate Profile

The BOROSIL Group comprises of

- Borosil Limited
- Borosil Renewables Limited
- Klass Pack Ltd.

Borosil Limited was established in December 1962 in collaboration with Corning Glass Works, USA, to manufacture borosilicate low expansion glass. In December 1988, Corning divested its shareholding to the current Indian promoters, who have been leading manufacturers of sheet glass in India, since 1961.

BOROSIL is the market leader in laboratory glassware and microwavable kitchenware in India.



Scientific and Industrial Products (SIP) Division

Borosil's SIP division offers an entire gamut of the finest quality scientific and laboratory equipment through a pan India network of 150 dealers. This includes laboratory glassware, instruments, disposable plastics, liquid handling systems and explosion-proof lighting glassware. This range of over 2000 products finds application in across diverse disciplines such as Quality Control in pharmaceutical industries, food and soil testing, Microbiology, Biotechnology, Photo Printing, Process Systems and Lighting. Symbolising quality, accuracy and dependability since 6 Decades, Borosil has earned the trust and unwavering loyalty of leading pharmaceutical companies and R&D laboratories, as well as scientific, health and educational institutions.



Consumer Products Division

Borosil's Consumer products aim at providing solutions for daily cooking, serving and storage needs of the consumer. In recent times, Borosil has expanded its consumer offering from its core glassware range to Opalware dinner sets (sold under the brand Larah), kitchen appliances, cookware and pressure cookers, storage products, glass and stainless steel lunch boxes, vacuum insulated flasks & bottles.

To cater to changing needs of the consumer and make the daily chores more convenient, Borosil has introduced a range of smart, practical and elegant Small Appliances, backed with Borosil's guarantee. These include Juicer Mixer Grinders, Hand Mixers, Oven Toaster Grillers, Toasters, Blenders and Rice Cookers. Moreover, to ensure that the user is never inconvenienced, each appliance is backed by our nation-wide customer service network.

Furthermore, Larah Opal glass products are a beautiful blend of elegance and performance, and are synonymous with Borosil's quest for perfection and excellence for over 50 years. Borosil has lent its expertise in glassware to this category making the products stronger and chip resistant. Contemporary designs, a range of sizes and colors coupled with the durability and toughness of the Opal glass result in this immaculately designed product with impeccable finish, to give the perfect daily dining experience.

For us, nothing is more important than the trust people place in us every time they welcome a Borosil product into their homes. Which is why, we don't just build products with utmost care but build them to make every day better. We do our best to ensure that our products always perform beautifully.

Visit www.myborosil.com for more details on products



Borosil Renewables Limited

Borosil Renewables Limited is the first and only solar glass manufacturer in India. The company spotted the opportunity in this segment quite early and commissioned the solar glass manufacturing facility at Bharuch in the Indian State of Gujarat in January 2010. Over the last 5 years, the solar PV installations and module production across the world have grown exponentially. In order to cater to the growing demand, Borosil Renewables has recently expanded and more than doubled its existing production capacity of high-performance solar glass to 2.5 GW per annum. The company is now working on the next expansion to add another 2.5 MW equivalent and be a 5.0 GW equivalent of solar glass manufacturer by Q1 2022. Domestic demand for Solar Photovoltaic modules has huge potential in order to meet the energy requirement for growth besides providing green energy. Govt. has laid down ambitious target of solar power installations of 100 GW by 2022 and has been creating enabling environment to achieve this.

The company has a strong focus on innovation and known for its pioneering achievements like the development of World's First fully tempered 2 mm thick solar glass, solar glass with lowest iron content giving highest glass efficiency, the first company in the World to successfully be able to remove an extremely hazardous substance – "Antimony" - from its solar glass, etc. Very recently the company has launched new products like Selene: an Anti-glare solar glass suitable for PV installations near airports, Shakti: a very high-efficiency solar glass in matt-matt finish. Amongst the upcoming products with enhanced features is the solar glass with Anti-soiling coating.

The company has a strong focus on expanding its domestic & export footprints. The export business has grown at a CAGR of 33% in the last 3 financial years. European market is a major customer base for the company where it has now successfully started supplies of its newly developed products, i.e. 2.0 mm and 2.5 mm fully tempered glass. With additional production now available, it has plans to substantially increase exports by tapping more customers in Europe as also increasing presence in the Americas and MENA regions.

The company is known for the benchmarked low energy consumption of 1121 Kcal/Kg compared to a level of 1700 Kcal/kg compared to any East Asian glass producer. The company is able to save 22% energy in comparison with the default score for glass manufacturing in Life Cycle Assessment by M/s. Solstice, a French institute which according to them is one of the best values so far for glass manufacturing. A part of Company's annual power requirement is fulfilled from own Wind Mill of 1.5 MW capacity. The Company is in the process of developing a large solar plant within the premises which could further reduce the carbon footprint.

Borosil Renewables Ltd. is a part of Borosil family which is a well-known for brand "BOROSIL®" that manufactures and sells a range of lab ware, scientific ware and consumer ware products.



BOROSIL **KLASSPACK**[®]

pharmaceutical packaging

Klass Pack Ltd., a subsidiary of Borosil Limited, is one of India's leading manufacturers of Glass Ampoules and Tubular Glass Vials of USP Type 1 that is widely used as primary packaging materials by pharmaceutical companies for their life-saving drugs. Klasspack also has customers in a wide range of industries viz., Dental, Cosmetics, Ophthalmic, Perfumes, Diagnostic, Chemical, Bio-tech, Animal Health and others. The two factories are located at Nashik, around 180 kms from Mumbai.

Klass Pack Ltd. was established in 1994 and quickly became a leader in the Pharmaceutical Packaging segment. Borosil acquired Klasspack in 2016 and combined its technological expertise in specialty glass production with Klasspack's experience in world class glass ampoule and tubular glass vial manufacturing to establish its leadership in the fast-growing Pharmaceutical Packaging segment.

Klasspack, an ISO 9001:2015 company, has registered its products under the US DMF governed by US FDA for both glass ampoule and tubular glass vial, and Canadian DMF governed by Health Canada. It has a state-of-the-art ISO 15378:2017 GMP certified plant, that can produce a huge variety of glass ampoules and tubular glass vials, ranging from 1ml to 50ml, based on the ISO DIN standards or customised to the requirements of our customers. With installed capacity of over 580 million glass ampoules and over 280 million glass vials per annum, Klasspack has one of the shortest lead time in the market.

Klasspack is focused on a knowledge-based approach towards product development, and has pioneered various studies in India on its glass containers such as extraction studies. A dedicated team handles product development and regulatory documentation, and can render technical support in glass ranging from laboratory-scale to commercial production scale.

Klasspack is staffed with one of the most dynamic and qualified team in the industry. It has won over customers with its flexible approach towards product customization and packaging, and a customer centric approach. It has built a solid reputation for quality and transparency, and meeting delivery commitments consistently without fail.

With a presence in more than 22 countries that includes the USA, Netherlands, Switzerland, Germany, Guatemala, Saudi Arabia, Greece, Romania, Kenya, Indonesia, Bangladesh and Thailand. With our customer centric approach Klasspack intends to be the most preferred source and a reliable partner for primary glass packaging requirements.

Klass Pack Ltd.

(A subsidiary of Borosil Limited)
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Borosil Technologies Limited is located at Hinjewadi, Pune and is a 100% owned subsidiary of Borosil Limited. Borosil Technologies Limited is mandated to develop Laboratory equipment which is offered by Borosil Limited branded as Labquest.

BOROSIL[®]

TECHNOLOGIES

Borosil Technologies Limited is equipped with Industrial design, Mechanical design, Embedded, Electronic, Software design capabilities, modern Assembly lines, Prototyping facilities, Service Center and an Application Lab.

Products developed and produced by Borosil Technologies Limited include Water Baths, Dry Baths, Nitrogen Estimation Systems, Stirrers, Vortex Mixers, Glass care equipment.

All products are designed to be **SMART, RUGGED & PRACTICAL**



Borosil Technologies Ltd.

21-24, Plot no 8, India land Global Industrial Park,
Hinjewadi Phase - 1, Pune - 411057, India.



LAB  QUEST
BY **BOROSIL[®]**

Customised glassware

We undertake the manufacture of special glassware to agreed specifications. Please send us your queries at the address below, including complete details of specifications, and drawings wherever possible. We would be pleased to assist you in formulating specifications within normal working tolerances. Usually, we only accept orders with a minimum order quantity.

Corporate Office :

Borosil Limited

Crescenzo, G-Block, Opp. MCA Club,

Bandra Kurla Complex,

Bandra (E), Mumbai - 400 051, India

Tel : 022 - 6740 6300

Fax : 022 - 6740 6514

Email : lab.customercare@borosil.com

conditions of sale

At Borosil, it is our policy to market our laboratory glassware through our wide network of Authorised Dealers. Strategically located all over World, they are best equipped to satisfy the individual requirements of users across the World. The products supplied will usually be in accordance with illustrations and descriptions however, Borosil reserves the right to make alterations and modifications depending upon circumstances and/or changes in official specifications, or as a result of design improvements.

Although the products are guaranteed for glass quality and workmanship, Borosil shall not be liable for any loss or damage or injury, arising directly or indirectly from the use of these products.

The images given in the Catalogue are for reference purpose only.
Actual products may differ from the images.

factory and production

automatic blank manufacturing facility



- State-of-art auto blowing facility used to produce blanks with uniform wall thickness and ensure exact shape and dimension according to the standards.
- All the blanks are manufactured from 3.3 Low Expansion Borosilicate Glass with controlled Internal Diameter tubing.

unique annealing facility



- All **Borosil** glasswares pass through annealing Lehr chamber where the stresses are eliminated under controlled heating and cooling process
- This annealing process ensures the long lasting printing quality. In order to get highest level of precision, carefully controlled gradual heating and cooling procedures are essential

petri dish manufacturing facility



manufacturing facility at Tarapur



advanced printing technology



wall thickness measure



- High definition printing for accurate and easy reading

automated vial forming machine



Global Presence



our warehouses

Six warehouses with floor area more than 1,50,000 Sq. feet PAN india

calibration process



BOROSIL is India's single largest manufacturer of a complete range of Volumetric Glassware. Borosil's Volumetric products are used in all laboratories from high-end pharmaceutical production companies to high schools and colleges.

BOROSIL adheres to the highest quality standards, right from the raw material used to the measurement and calibration of the finished product. Visual and physical quality checks are undertaken at each stage of production, in order to ensure the highest quality product for customers.

BOROSIL ensures that every Volumetric Glassware product is of the highest quality in the following parameters:

1. **Accuracy** : Please see 'Calibration Process' for a detailed understanding of how Borosil Volumetric Glassware is the most accurate in the world.
2. **Mechanical Strength** : All Borosil laboratory glassware products are annealed in a special chamber wherein the stress as developed during the manufacturing process is eliminated with a controlled heating and cooling process. Moreover, Borosil's production processes ensure uniform wall thickness across all products, thereby enhancing their mechanical strength.
3. **Thermal Shock Resistance** : The annealing process further ensures that Borosil products are free of residual stress. The uniform wall thickness of Borosil products prevents damage owing to repeated heating and cooling in laboratories.
4. **Chemical Durability** : All Borosil laboratory glassware products are manufactured using 3.3 low expansion ASTM E-438, USP Type 1 Class A borosilicate glass. This glassware, by nature, is resistant to attack from acids, salt solutions and organic solvents.

calibration process



Computer controlled automatic calibration machine with optical laser beams to prevent human error and ensure highest level of accuracy and precision

BOROSIL performs the calibration process with fully automatic state-of-the-art calibration machines that eliminate any possibility of human error. This also ensures a high degree of repeatable measurements for all Borosil Volumetric products.

BOROSIL has an in-house set-up of a well-equipped temperature-controlled calibration laboratory with precision electronic balances, thermometers and stopwatches that are traceable to national standards. Calibration of Volumetric Glassware is entrusted to only trained and experienced technicians.

The following steps are carried out by highly precise, fully automated computer-controlled machines:

1. Filling the Volumetric blanks with a precisely-defined amount of de-mineralized water under controlled temperature.
2. The meniscus is determined with a laser-controlled camera at the exact lowest point of the water level, and the calibration mark is made with a fine diamond wheel. This gives accuracies that cannot be achieved by manual calibration.
3. Cylinders, Burettes and Pipettes are marked at a minimum of two calibration points.
4. The wet surface area factor is always taken into account, throughout the process.
5. The calibration laboratory is temperature, light controlled and temperature is maintained at $23^{\circ}\text{C} \pm 2^{\circ}\text{C}$.

All Volumetric Glassware is calibrated either as **To contain TC / In**

The contained quantity of liquid corresponds exactly to the capacity indicated on the article (e.g. graduated cylinders and volumetric flasks).

To deliver TD / Ex

The delivered quantity of liquid corresponds exactly to the capacity indicated on the article. (e.g. pipette and burettes).

These steps ensure that each and every Volumetric product leaving the **BOROSIL** facility meets the highest international standards and can be used for various purposes with the highest degree of repeatability and accuracy.





NABL certified products

In this catalogue, we present the complete range of Borosil products that are available with a Calibration Certificate issued by the NABL-accredited laboratory.

In certain critical areas, it is mandatory that representative samples of Volumetric products used by the laboratories be sent to NABL-accredited laboratories for testing of the calibration.

With the establishment of our own facility, our customers can now get the products certified by our laboratory directly, without sending them to other laboratories, saving a considerable amount of time and cost.



ISO certification



- Developed with today's complex marketplace in mind, ISO 9001:2015 provides an integrated approach to quality management – putting quality at the heart of business.
- ISO 9001 is a quality management system, implementing a systematic and process driven approach to managing our business.
- A Quality Management System is what ensures a business' products or services meets a certain level of quality; that is, they are reliable, safe, consistent, meet customer expectations, continuously improve and comply with the law.



Individual calibration certificate



Now ACCESS your BOROSIL glassware certification from anywhere, anytime....



Download the **BOROSIL®** app 

Individual Calibration Certificate can also be accessed on www.borosil.com



Rain water harvesting has been deployed in our 110 acre facility in Gujarat, since 2003.

Wind energy is the source of 48% of all the electricity that we consume.

Our Borosolar water heating systems are used to heat the water supplied in all Borosil Guesthouses and Colonies.

Our other energy efficient measures include advanced waste heat recovery systems and solar lighting.

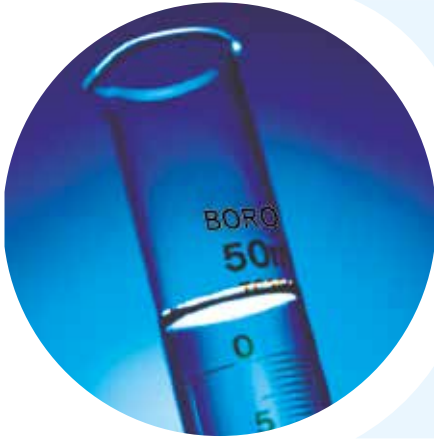
Our in-house 9 hole par 36 Golf Course is maintained by using the water from our rain water harvesting initiative.

We nurture

Borosil supports and runs a school, for children from neighbouring villages and employees' children.

Borosil proposes to open a hospital in the near future.





ACCURACY

- Computer Controlled Calibration
- Reliability in experiments through individually certified volumetric glassware
- Facilitates audit procedures in the laboratory
- Enhanced production from new facility



MECHANICAL STRENGTH

- Optimum wall thickness
- Annealed glassware imparts better mechanical strength
- Ideal for vacuum application, wet and dry sterilization
- Harder, hence lasts longer



THERMAL SHOCK RESISTANCE

- Safely withstands thermal shock
- Annealed to remove residual thermal Stress
- Thinner, uniform wall, hence lasts longer



CHEMICAL DURABILITY

- High resistance to attack from acids, salt solutions and organic solvents
- Low alkalinity, hence less leaching
- Low alkalinity makes glass harder, hence lasts longer

Technical Information

Borosil Low Expansion Borosilicate Glass:

From the 16th century to the present day, chemical research teams have been using glass containers for a very simple reason... As the glass container is transparent, the contents and the reaction are clearly visible. However, since chemists need to heat, cool and mix chemical substances, ordinary glass is not always appropriate for laboratory work.

Laboratory work requires apparatus made of glass that can readily be moulded into any desired shape or form. It requires glass that offers maximum inertness when in contact with the widest range of chemical substances. The glass should have the capability to withstand thermal shock without fracture, and it should facilitate high temperature work without deforming. It should be resilient enough to survive the everyday knocks to which it will be subjected in normal laboratory handling, washing and sterilising processes.

Borosil is the trade name of such a glass.

The products represent optimum mechanical, thermal and chemical behaviour. This glass is used in laboratories as well as for industrial applications, where thermal shock resistance, mechanical resistance as well as unusual chemical resistance are required.

Borosil glass is a low alkali borosilicate Type 3.3 glass. Its typical chemical composition is given below. It is virtually free from the Magnesia-Lime-Zinc group, and is also completely free of arsenic and other heavy metals.

	Approx % by weight
SiO ₂	81
B ₂ O ₃	13
Na ₂ O / K ₂ O	4
Al ₂ O ₃	2

Thermal Properties

Borosil glass has a low co-efficient of thermal expansion. Consequently, the thermal stresses under a given temperature gradient are also low. The glass can withstand higher temperature gradients and also sudden temperature changes / thermal shocks. Minute scratching of the glass surface can, however, reduce its thermal resistance.

'Strain Point' should be regarded as the maximum safe operating temperature for Borosil glassware. When heated above 500°C, the glass may acquire permanent stresses on cooling.

All Borosil laboratoryware is annealed in a modern Lehr, under strictly controlled conditions to ensure minimal residual stresses in the products.



The typical thermal properties of Borosil glassware are mentioned below :

Coefficient of Linear Expansion	32.5 x10⁻⁷cm / cm / °C
Strain Point	515°C
Annealing Point	565°C
Softening Point	820°C
Specific Heat	0.2
Thermal Conductivity (Cal / cm³ / °C / sec)	0.0027

Chemical Data

BOROSIL 3.3 Glass is highly resistant to water, neutral and acid solutions, concentrated acids and acid mixtures, and to chlorine, bromine, iodine and organic substances. The chemical resistance of this glass is superior to that of most metals and other materials, even when exposed to long processing periods and temperatures above 100 °C. A slight release of mainly monovalent ions takes place after exposure of the glass to water or acids. A very thin layer of impervious silica gel is subsequently formed on the surface of the glass, which in turn slows down further attack. At higher temperatures and in more concentrated forms the glass surface is subject to increased attack by hydrofluoric acid, hot phosphoric acid and alkaline solutions.

Hydrolytic Class (ISO 719)HGB 1

Acid Class (DIN 12 116) **S 1**

Alkali Class (ISO 695) **A 2**

Safe Use of Glassware

Borosil laboratory apparatus is designed to perform efficiently and last long, provided it is used with proper care. The following notes are presented to assist users in deriving the maximum life and performance from their Borosil apparatus.

The following precautions will assist in preventing failures during heating and cooling procedures.

- Do not leave the vessel unattended when evaporation work is being carried out. The vessel may crack or explode as the 'dryness' condition approaches and if the heat source is not adjusted correctly. Decrease the temperature gradually as the liquid level drops.
- Always stay cautious when removing glassware from a heat source. Avoid placing it on a cold or damp surface.
- Even though glassware can withstand extreme temperatures, please keep in mind that sudden temperature changes may cause the vessel to break.
- Always cool vessels slowly to prevent thermal breakage.
- Never apply heat to badly scratched or etched vessels as their thermal strength would have been greatly reduced.
- Never apply point source heating to a vessel; it increases the possibility of breakage.
- All laboratory glassware will withstand to thermal shock of 120°C
- Always diffuse the heat source by using a metal gauze or air/water bath. Alternatively, move the vessel slowly in relation to the heat source to ensure even heating.



- ♦ Adjust the Bunsen Burner to get a large, soft flame. It will heat slowly, but uniformly. Uniform heat is a critical factor for some chemical reactions.
- ♦ Ensure that the flame is in contact with the vessel below the liquid level. Heating above this level may result in breakage of the vessels.
- ♦ Always use anti-bumping devices in the vessel, such as powdered pumice or glass wool, when the vessel and its contents are required to be heated rapidly.
- ♦ Never use any material with sharp edges, such as broken porcelain, as an anti-bumping device. This will cause internal abrasions and reduce the mechanical and thermal strength of the vessel.
- ♦ Thick-walled glassware should not be subjected to direct flame or any other localised heat source. An electric immersion heater is ideally used for heating vessels of this type.
- ♦ Thick-walled glassware should not be subjected to direct flame or any other localised heat source. An electric immersion heater is ideally used for heating vessels of this type.
- ♦ Avoid heating glassware over electric heaters with open elements. Uneven heat of this type can induce localised stress and increase the possibility of breakage.
- ♦ Always keep in mind that a hot plate will retain heat long after the appliance has been switched off.
- ♦ Always ensure that the surface of the hot plate is larger in area than the base of the vessel being heated. A plate that is under-sized for the job at hand will result in uneven heating and may even cause breakage of the glassware.
- ♦ Always ensure that manufacturer's instructions are followed when using electrical heat sources.

Mixing and Stirring

- ♦ Always use a teflon sleeve or a similar device on stirring rods, to prevent scratching of the inside of the vessel.
- ♦ When using a glass vessel with a magnetic stirrer, always use a covered follower. This prevents abrasion of the inside of the vessel.
- ♦ When using a glass or metal mechanical stirrer in a glass vessel, always pre-determine the height of the stirrer before use, to ensure that the stirrer blade does not come in contact with the base or sides of the vessel.
- ♦ Never mix sulphuric acid and water inside a glass measuring cylinder. The heat caused by the reaction can break the base of the cylinder.

Vacuum and Pressure

- ♦ Never use glassware beyond the recommended safe limit.
- ♦ Always use a safety screen when working with glassware subjected to pressure or vacuum. Never subject glassware to sudden pressure changes
- ♦ Apply and release positive or negative pressures gradually.
- ♦ Laboratory Bottles are not recommended for use under pressure or vacuum, unless otherwise specified.

Joining and Separating Glass Apparatus

- ♦ When storing glass stopcocks and joints, insert a thin strip of paper between the joint surfaces to prevent them from sticking.
- ♦ Do not store stopcocks with lubricants on the ground surfaces for long durations.
- ♦ Glass stopcocks on Burettes and Separating Funnels require frequent lubrication to prevent them from sticking.
- ♦ If a ground joint sticks, separation can usually be achieved by carefully rocking the Cone in the socket, or gentle tapping the socket flange on a wooden surface, or by heating the socket and not the Cone in a localised flame. Using penetrating oil facilitates separation.
- ♦ When using lubricants, it is advisable to apply a light coat of grease all around the upper part of the joint. Use only a small amount, and avoid greasing the part of the joint that comes in contact with the inside of the apparatus.
- ♦ Three types of lubricants are commonly used on standard taper joints.
 - (a) Hydrocarbon grease is the most widely used. It can be removed easily by most laboratory solvents, including acetone.
 - (b) As hydrocarbon grease is easy to remove, silicon grease is usually preferred for higher temperature or high vacuum applications. It can be removed with chloroform easily.
 - (c) For long-term reflux or extraction reactions, a water-soluble, organic and insoluble grease such as glycerin, is suitable. Glycerin can be removed by means of water.
- ♦ When inserting glass tubing into a bung, it is recommended to use water, oil or glycerol on both, the tubing as well as the rubber bung. Always wear heavy protective gloves or similar protection when carrying out this operation.
- ♦ Always fire-polish the rough ends of the glass tubing before attempting to insert it into flexible tubing. The lubricants recommended above may also prove useful.
- ♦ Never attempt to pull a thermometer out of a rubber bung; always cut the bung away.

Personal Safety

- ♦ Use tongs or asbestos gloves to remove any glassware from heat. Hot glass can cause severe burns.
- ♦ Protective gloves, safety shoes, aprons and goggles should be worn to safeguard against chemical accidents, spilling or splattering.
- ♦ Always flush the outside of the acid bottle with water before opening it. Do not place the stopper on the counter top, where someone else may come in contact with acid residue.
- ♦ Care should be taken when handling mercury. Even a miniscule amount of mercury in the base of a drawer can poison the atmosphere in an entire room. Mercury toxicity



is cumulative and the element's ability to amalgamate with a number of metals is well known. Following any accident involving mercury, the area should be checked thoroughly to ensure that there are no globules remaining. All mercury containers should be kept well stoppered.

- Never drink from a beaker. A beaker intended specifically for the use of drinking is a hazard in the laboratory. Do not taste chemicals to identify them. Smell chemicals only when necessary, and only by wafting a small amount of vapour towards the nose.
- Avoid using a Pipette with the mouth, particularly when using concentrated acids, alkalis or potentially bio-hazardous materials. Use mechanical means, such as a rubber bulb or an automatic dispenser.
- Do not fill the receptacle with any material other than that mentioned on the label. Label all containers before filling. Discard the contents of any unlabelled containers.
- To prevent breakage when clamping glassware, do not permit glass-to-metal contact, and do not use excessive force to tighten the clamps.
- Do not look down into a Test Tube being heated or containing chemicals, and do not point its open end at another person. A reaction could cause the contents to be ejected suddenly, resulting in injury.
- Splattering from acids, caustic materials and strong oxidising solutions on the skin or clothing should be washed off immediately with large quantities of water.
- When working with chlorine, hydrogen sulphide, carbon monoxide, hydrogen cyanide and other highly toxic substances, always use a protective mask. Alternatively, perform these experiments under a fume hood in a well ventilated area.
- In working with volatile materials, please keep in mind that heat causes expansion and confinement of such expansion results in explosion. Also remember that this danger exists even if external heat is not applied.
- Perchloric acid is particularly dangerous as it explodes when brought in contact with organic materials. Do not use perchloric acid around wooden benches or tables.
- Keep perchloric acid bottles on glass or ceramic trays with capacity that is adequate to hold all the acid in case the bottle breaks.
- When using perchloric acid, always wear protective clothing.
- When using hot plates and other electrical equipment, always ensure that the wire and plugs are in good condition. Do not handle an electrical connection with damp hands.

Cleaning :

Cleaning of new glassware: New glassware is slightly alkaline in reaction. New glassware should be soaked for about 2 to 3 hours in acidic water (1 % solution of hydrochloric acid or nitric acid). Rinse with water and then soak the empty glassware in a basin / tub containing Suitable cleaning agent / solution for 20 to 30 minutes.

Follow the procedure of cleaning as given below.

- **Cleaning of regular glassware :** Remove the content of glassware before washing. Remove all markings / sticker labels from the glassware. Glassware should be brought to ambient temperature before subjecting them for cleaning, if they are heated or cooled during analysis. Rinse with water and then soak the empty glassware in a basin / tub containing Suitable cleaning agent or any suitable detergent solution for about half an hour. Scrub all the parts of glassware thoroughly with brush impregnated with 0.1% Suitable cleaning agent. Brush should be selected as per the shape and size of the glassware. Brushes should always be in good condition to avoid any abrasion of the glassware. Do not use brushes with metallic bristles vigorously as it may form scratches on the surface. After applying cleaning agents thoroughly rinse glassware with tap water ensuring that containers are partly filled with water, shaken horizontally and vertically and emptied several times for effective cleaning. It is very important that all soap detergents and other cleaning fluids be removed from glassware before use. Finally rinse the glassware with purified water. Dry glassware in a drying oven at temperature at 60°C and store in a designated place.
- Glassware used for sticky, waxy or greasy material should be rinsed initially with acetone or hot water with detergent in which the material residue dissolves and then to be cleaned as per cleaning procedure.
- Glassware used for water immiscible solvents should be initially rinsed with acetone or suitable solvent.
- To remove precipitate materials or unduly clouded or coagulated organic matter from glassware apply hot nitric acid for effective cleaning.
- Strong alkali should not be used for cleaning of glassware. Also use of Chromic acid, sulphuric acid mixture is not recommended because of hazardous and toxic nature of the material.
- If glassware is exceptionally dirty, a cleaning powder with a mild abrasive action can be applied provided the surface is not scratched.
- Glassware required for total organic carbon (TOC) analysis should be scrupulously cleaned of organic residue. This can be achieved by rinsing glassware with hot nitric acid, followed by rinsing with purified water. Preferably such glassware should be maintained separately (away from organic solvents and materials) and to be dedicated for TOC determination analysis only.
- If the glassware is used for analysis of potent material such as steroids, hormones or cytotoxic, soak the glassware in suitable deactivating agent. After deactivation, clean as per cleaning procedure



Pipettes cleaning :

- ◆ Place Pipettes with their tips down, in a cylinder or tall jar of water, immediately after use. Do not drop them into the jar as this may break or chip the tips and render the Pipettes useless for taking accurate measurements. A pad of cotton or glass wool at the base of the jar will help to prevent breaking of the tips. Please ensure that the water level is high enough to immerse the greater portion of all or each of the Pipettes. Then drain the Pipettes and transfer them into a cylinder or jar containing any Suitable cleaning agent or any suitable detergent solution. Allow it to soak in a jar or cylinder for about half an hour. Drain the pipette and run tap water over and through them until all contents are removed. Soak the Pipettes in purified water for at least one hour. Remove them and dry the external surface with a cloth, shake out the water and dry in oven.
- ◆ In laboratories where a large number of Pipettes are used everyday, it is convenient to use an automatic Pipette washer.
- ◆ After drying, place the Pipettes in a dust-free drawer. Wrap serological and bacteriological Pipettes in paper or place them in Pipette cans and sterilise them in the dry air steriliser at 160°C for two hours. A Pipette used for transferring infectious material should have a plug of cotton placed in its mouth end before sterilising.

Burettes cleaning

- ◆ Remove stopcock key and wash the burette with Suitable cleaning agent or any other suitable detergent solution
- ◆ Rinse with tap water until all the dirt is removed. Then rinse with purified water.
- ◆ Wash the stopcock key separately. Keep the cleaned burette in inverted position until dry. Open the stopcock and keep for drying. Before the stopcock key is replaced in the burette, lubricate the joint with a small amount of lubricant. Remember that burette stopcock keys are not interchangeable.
- ◆ Always cover tip of burettes with butter paper or aluminium foil, when not in use.
- ◆ Please note glass stopcocks are not interchangeable.
- ◆ The glass key and burette bore should be marked properly to avoid mixup.

Culture Tubes

- ◆ Culture tubes which have been used previously must be sterilized before cleaning. The best general method for sterilising culture tubes is by autoclaving for 30 minutes at 121°C (15 lb pressure). Media which solidify on cooling should be poured out while the tubes are hot. After the tubes are emptied, brush with Suitable cleaning agent. Rinse thoroughly with tap water, rinse with purified water, shake out the water and dry in oven.
- ◆ If tubes are to be filled with a medium which is sterilized by autoclaving, do not plug until the medium is added. Both medium and tubes are thus sterilized with one autoclaving.
- ◆ If the tubes are to be filled with a sterile medium or if they are to be sterilized by the fractional method sterilize the tubes in the autoclaves or dry air sterilizer before adding the medium.

Serological Tubes (Test Tubes)

- ◆ Serological Tubes should be chemically clean but need not be sterile. However, specimens of blood which are to be kept for some time at room temperature should be collected in a sterile container. It may be expedient to sterilize all tubes as routine.
- ◆ To clean and sterilize tubes containing blood, discard the clots in a waste container and place the tubes in a large basket. Put the basket with others, in a large bucket or boiler. Cover with water, add a fair quantity of soft soap or Suitable cleaning agent and boil for 30 minutes. Rinse the tubes and clean with brush, rinse and dry with the usual precautions.
- ◆ It is imperative when washing serological glassware that all acid, alkali and detergent be completely removed. Both acid and alkali in small amounts destroy complement and in larger amounts produce hemolysis. Detergents interfere with serologic reactions.
- ◆ Serological tubes and glassware should be kept separate from all other glassware and used for nothing except serologic procedures.



Application Note

- Autoclaves are widely used to sterilise instruments, glassware and plasticware, solutions and media, and to decontaminate biological wastes. Due to the physical hazards (e.g. heat, steam and pressure) associated with autoclaving, extra care must be taken to use them safely. Each Autoclave has unique characteristics and operating requirements. Please review and understand the owner's manual before using any Autoclave for the first time, and every time thereafter. Also, please follow all the safety regulations for autoclaving, laid down by your institution.

Autoclaving BOROSIL Glassware

- Borosil recommends the following safety practices when autoclaving laboratory glassware:
- Never autoclave items containing corrosives (e.g. acids, bases, phenol), solvents or volatiles (e.g. ethanol, methanol, chloroform) or radioactive materials.
- Place individual glassware vessels within a heat-resistant plastic or metal tray on a shelf or rack. Never place them directly on the Autoclave base or floor. Always maintain space (>5 cm) between glass vessels to give them room to expand while heating, and to prevent them from hitting other vessels when entering or leaving the Autoclave. Add water rising up to 1/4 to 1/2 inch in the tray, so that the glassware will heat more evenly.
- Check any plastic caps, tubing or other items to ensure they can be safely autoclaved with the glassware.
- Fill the glassware only half full with the liquids to be sterilised. Take into account, the volume of liquid to be autoclaved. A 2-litre flask containing 1 litre of liquid takes much longer to sterilise than four 500 ml flasks, each containing 250 ml of liquid.
- Do a test run when autoclaving larger volumes of liquid, to make sure that the liquid has reached 121°C.
- Large heavy glassware, such as 3L or larger spinner flasks, 5L or larger bottles and carboys should have a small amount of distilled water placed inside them to help generate steam when they are being sterilised dry in an Autoclave.
- Suspend an Autoclave thermometer with a thin wire, in the middle of the liquid-filled container to record the highest temperature reached. Then, check its reading after the Autoclave run is complete. If the temperature is too low, then the run-time will need to be increased or the volume will need to be reduced.

- To prevent bottles from getting shattered during pressurisation, the caps of the vessels with liquids must be loosened completely before loading. Always use the slow exhaust or liquid cool cycle when autoclaving liquids, to prevent the liquid from boiling over, causing loss of the contents.
- Never autoclave a sealed vessel containing liquids as this may result in an explosion of the super-heated liquid and steam during the cycle, or when the vessel is opened.
- Wear heat-resistant gloves when opening the Autoclave door after a cycle. When removing items from an Autoclave, at least a rubber apron, rubber sleeve protectors and heat-resistant gloves should be worn.
- Wait for 5 minutes before removing dry glassware from the Autoclave, and wait for 10 to 20 minutes before removing glassware containing liquids. The larger the volume of liquid, the longer you should wait. Liquids removed too soon may boil and overflow from the vessel, causing burns to the operator.
- Do not tighten caps on the vessels immediately after autoclaving as the cap or the vessel may get shattered due to the vacuum resulting from the cooling of the steam in the vessel. This is particularly important for larger vessels. Caps with liners may have their liner sucked into the vessel if the cap on the vessel opening is not loose enough.
- Do not put hot glassware, especially large bottles, from an Autoclave (or any other heat source) on to a cold bench top. The stress that is induced will often cause the base of the vessel to crack or fall off, releasing its hot contents.
- For non-liquid loads, please allow the glassware to cool for 15 minutes before touching it with ungloved hands.
- For liquid loads, please allow the liquid to stand for a full hour before touching the glassware with ungloved hands. Ensure that others in the vicinity are aware of the presence of a heat hazard.

Cleaning validation of laboratory glassware:

As per USP – NF General Chapter 1051 (Cleaning Glass Apparatus), it is important to verify that the cleaning procedure is appropriate for the particular test or assay being undertaken. This can be accomplished in a number of ways, including use of experimental controls or verification of cleaning by utilization of residue/ residual testing to ensure removal of any potential contaminants.

It is recommended that Cleaning Validation of the laboratory glassware is to be performed once in a year to ensure effectiveness of cleaning procedure to remove residue of drug substances as well as cleaning agent used.

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glassware



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Laboratory equipment



BOROSIL
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vials and ampoules



A

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Beakers

Whether it is research, industry or education, the Beaker has a wide range of applications. This simple container, used for stirring and mixing liquids, is also ideal for heating them. Controlled wall thickness at the sides, radius and the base, ensures a fine balance between the thermal resistance and mechanical strength, to enable effective heating. Many beakers also have a spout and that makes pouring easier and more precise.

BOROSIL® Glasswares are best-in-class products with several advantages. They have a high level of thermal shock resistance and a high operating temperature. Besides using USP type I borosilicate glass constant quality control checks are conducted throughout the production process to ensure uniformity of the wall thickness. Such uniform wall thickness distribution prevents uneven expansion and stressing of the glass that often results in a failure.

Beakers are mainly used as heating vessels. The tall-shape design of the Beaker is ideal for heating in a liquid bath, especially when the contents need to be kept distinctly apart from the surrounding medium materials.

BOROSIL® brand low form Beaker (Cat No. 1000) and **BOROSIL®** brand Tall Form Beaker (Cat No. 1060) are two popular styles used for storage and mixing.

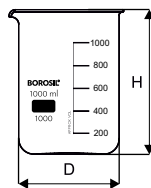
BOROSIL® offers full range of beakers to suit every application.



1000 - BEAKERS

Low form Beakers with spout

- Complies with IS 2619 / EN ISO 3819 and DIN 12331
- The spout design enables clean and precise pouring
- Uniform wall thickness distribution makes it ideal for heating liquids
- The easy-to-read scale and large labelling field makes marking easier
- High resistance to chemical attack



Product Code	Capacity ml	Approx O.D. x Height mm	Quantity Per Case
1000005	5*	22 x 30	20
1000006	10*	26 x 35	20
1000009	25	34 x 50	60
1000D12	50	42 x 60	60
1000D16	100	50 x 70	40
1000D18	150	60 x 80	40
1000D21	250	70 x 95	40
1000D23	400	80 x 110	40
1000D24	500	83 x 115	40
1000D25	600	90 x 125	40
1000028	800	100 x 135	20
1000D29	1000	105 x 145	20
1000D30	2000	130 x 185	6
1000D31	3000	150 x 210	4
1000D33	5000	170 x 270	4
1000D38	10000	220 x 350	1

25ml to 10000ml Graduated.

* 5 ml and 10 ml Beakers are not graduated.

**500 & 10000 ml not covered in IS and DIN standards.

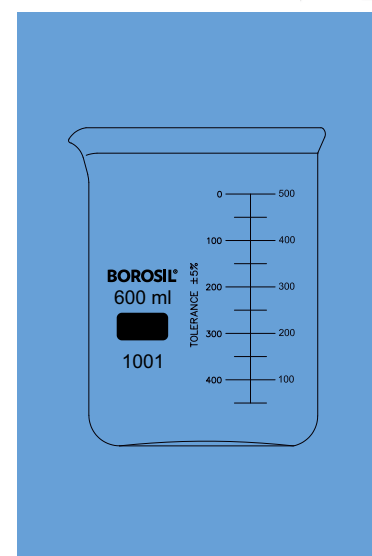
1001 - BEAKERS, ASTM

Low form Beakers with spout

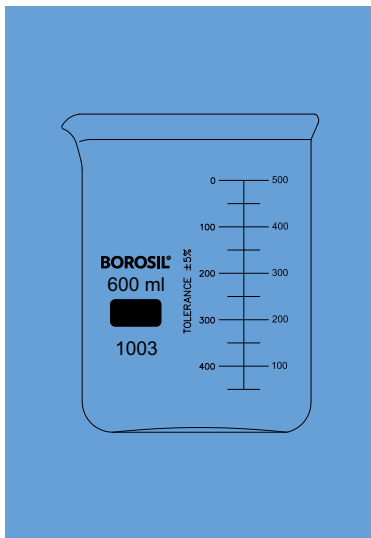
- Manufactured from 33 expansion borosilicate glass conforming to ASTM E438
- Type I, class A, Complies to ASTM E 960, Type I
- The spout design enables clean and precise pouring
- Uniform wall thickness distribution makes it easier for heating liquid
- Large labelling field for easy marking
- Printed in Double Scale for Easy reading
- High Resistance to Chemical attack

Product Code	Capacity ml	Approx O.D. x Height mm	Quantity Per Case
1001006	10	25 x 35	48
1001008	20	32 x 42	48
1001010	30	35 x 50	48
1001012	50	42 x 60	48
1001016	100	50 x 70	48
1001018	150	56 x 85	48
1001021	250	70 x 95	48
1001023	400	77 x 110	48
1001025	600	90 x 125	36
1001028	800	100 x 135	24
1001029	1000	105 x 145	24
1001030	2000	130 x 185	8

new



new

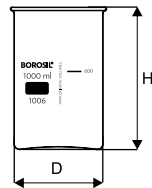


1003 - BEAKERS, ASTM

Heavy Duty Low Form Beaker with Spout as per ASTM

- Manufactured from 33 expansion borosilicate glass conforming to ASTM E438 Type I, class A, Complies to ASTM E 960, Type II
- The spout design enables clean and precise pouring
- Uniform wall thickness with reinforced rim and spout
- Large labelling field for easy marking
- Printed in Double Scale for Easy reading
- High Resistance to Chemical attack
- Not recommended for use for heating

Product Code	Capacity ml	Approx O.D. x Height mm	Quantity Per Case
1003018	150	56 x 85	48
1003021	250	68 x 95	48
1003023	400	77 x 115	48
1003025	600	90 x 130	36
1003029	1000	105 x 155	24

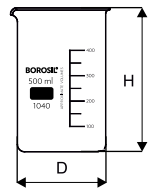


1006 - BEAKERS

Tablet Disintegration

- It has a large labelling field that enables easy marking
- Specially designed for Tablet disintegration machine

Product Code	Capacity ml	Approx O.D. x Height mm	Quantity Per Case
1006029	1000	105 x 145	10



1040 - TALL FORM BEAKER

Without Spout

- Complies with IS 2619 / EN ISO 3819 and DIN 12331
- Graduated to indicate the approximate content
- The easy-to-read scale and large labelling field make marking easier
- Uniform wall thickness distribution makes it ideal for heating liquids
- This beaker is designed without a pouring spout

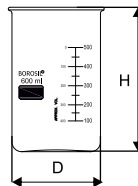
Product Code	Capacity ml	Approx O.D. x Height mm	Quantity Per Case
1040012	50	38 x 70	40
1040016	100	48 x 80	40
1040018	150	54 x 95	40
1040021	250	60 x 120	40
1040024*	500	80 x 140	20
1040025	600	80 x 150	20
1040028	800	90 x 175	20
1040029	1000	95 x 180	20

*Not in standards

1050 - BEAKERS, ASTM

Tall form beaker Without Spout

- Manufactured from 33 expansion borosilicate glass conforming to ASTM E438 Type I, class A
- Complies to ASTM E 960, Type IV
- The spout design enables clean and precise pouring
- Uniform wall thickness distribution makes it easier for heating liquid
- Large labelling field for easy marking
- Printed in Double Scale for Easy reading
- High Resistance to Chemical attack

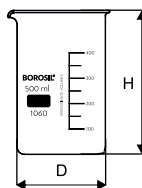


Product Code	Capacity ml	Approx O.D. x Height mm	Quantity Per Case
1050016	100	48 x 80	12
1050020	200	56 x 105	12
1050022	300	65 x 120	12
1050023	400	70 x 130	6
1050024	500	77 x 140	6
1050025	600	80 x 155	6
1050029	1000	90 x 190	6

1060 - BEAKERS

Tall Form, with Spout

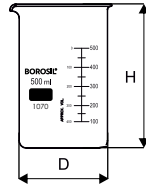
- Complies with IS 2619 / EN ISO 3819 and DIN 12331
- Uniform wall thickness distribution makes it ideal for heating liquids
- Graduated to indicate the approximate content
- All sizes are equipped with a durable matt-finished enameled space for marking
- This Beaker is designed with a pouring spout



Product Code	Capacity ml	Approx O.D. x Height mm	Quantity Per Case
1060012	50	38 x 70	40
1060D16	100	48 x 80	40
1060018	150	54 x 95	40
1060D21	250	60 x 120	40
1060D24	500	80 x 140	20
1060025	600	80 x 150	20
1060028	800	90 x 175	20
1060D29	1000	95 x 180	20

*Not in standards

new

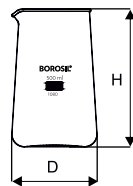


1070 - BEAKERS, ASTM

Tall form beaker With Spout as per ASTM

- Manufactured from 33 expansion borosilicate glass conforming to ASTM E438 Type I, class A Complies to ASTM E 960, Type II
- The spout design enables clean and precise pouring
- Uniform wall thickness with reinforced rim and spout
- Large labelling field for easy marking
- Printed in Double Scale for Easy reading
- High Resistance to Chemical attack
- Not recommended for use for heating

Product Code	Capacity ml	Approx O.D. x Height mm	Quantity Per Case
1070016	100	48 x 80	12
1070020	200	56 x 105	12
1070022	300	65 x 120	12
1070023	400	70 x 130	6
1070024	500	77 x 140	6
1070025	600	80 x 155	6
1070029	1000	90 x 190	6



1080 - BEAKERS

Phillips (Conical) with Spout

- Its mouth is smaller in diameter than its base
- The Phillips Beaker is ideal for measuring, containment, mixing and decanting
- Conical shape (Phillips pattern) with spout
- Excellent thermal performance and chemical resistance

Product Code	Capacity ml	Approx O.D. x Height mm	Quantity Per Case
1080021	250	68 x 110	40
1080024	500	88 x 145	40

INDUSTRIAL MAGNETIC STIRRER

Solutions for
Stirring Applications



ROBUST



CIP



SIP



SCAN TO KNOW MORE

Proudly Made in India

Bottles

Bottles have multiple uses, as Aspirator, Reagent and Solution Bottles. Bottles are not used for direct heating purpose. They are designed with heavier wall thickness, making them mechanically stronger to withstand wet or dry sterilisation. The high chemical durability of the glass ensures that most of the reagents can be stored in these bottles for long durations in almost the same condition. Plain Neck Solution Bottles are designed to have a uniform rubber stopper fit. Roux Bottles have flat surfaces and are widely used for culture growth.

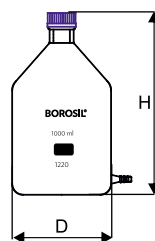
The outstanding **BOROSIL** quality provides capabilities for a wider range of functions, from long-term storage to the most demanding applications in the pharmaceutical industry.



1220 - ASPIRATOR BOTTLES

With GL 45 Cap and Tubulation

- Complies with IS 1388 (Part III), EN ISO 4796-3
- Complete with PP screw cap and pouring ring
- Suitable for storage of aggressive media
- All sizes have a durable matt-finished enamelled area for marking



Product Code	Capacity ml	Approx O.D. x Height* mm	Thread Specification	Quantity Per Case
1220021	250**	70 x 140	GL 45	10
1220024	500**	86 x 176	GL 45	10
1220029	1000	101 x 225	GL 45	10
1220030	2000	136 x 260	GL 45	5
1220033	5000	181 x 330	GL 45	1
1220038	10000	235 x 410	GL 45	1
1220040	20000	296 x 505	GL 45	1

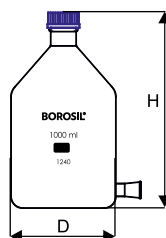
**Not covered in ISO / DIN standards.

*Height indicated is of Bottle only

1240 - ASPIRATOR BOTTLES

With GL-45 Cap and Socket

- Complies with IS 1388 (Part III), EN ISO 4796-3
- Complete with PP screw cap and pouring ring
- Suitable for storage of aggressive media
- All sizes have a durable matt-finished enamelled area for marking



Product Code	Capacity ml	Approx O.D. X Height* mm	Thread Specification	Outlet Ground Joint Size	Quantity Per Case
1240029	1000	101 x 225	GL 45	24 / 29	10
1240030	2000	136 x 260	GL 45	29 / 32	5
1240033	5000	181 x 330	GL 45	29 / 32	1
1240038	10000	235 x 405	GL 45	29 / 32	1
1240040	20000	296 x 500	GL 45	29 / 32	1

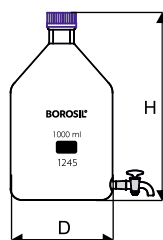
*Height indicated is of Bottle only

***As per Borosil dimension

1245 - ASPIRATOR BOTTLES

With GL 45 Cap and Interchangeable Stopcock

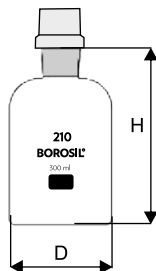
- Complies with IS 1388 (Part III), EN ISO 4796-3
- Complete with PP screw cap and pouring ring
- Suitable for storage of aggressive media
- All sizes have a durable matt-finished enamelled area for marking
- Dosing of liquids via stopcock



Product Code	Capacity ml	Approx O.D. X Height* mm	Thread Specification	Outlet Ground Joint Size	Quantity Per Case
1245029	1000	101 x 225	GL 45	24 / 29	10
1245030	2000	136 x 260	GL 45	29 / 32	4
1245033	5000	181 x 323	GL 45	29 / 32	1
1245038	10000	235 x 410	GL 45	29 / 32	1
1245040	20000	296 x 500	GL 45	29 / 32	1

*Height indicated is of Bottle only

***As per Borosil dimension



1250 - B.O.D. BOTTLES

With Interchangeable Stopper and plastic cap

- Complies with IS 9213
- Used for determination of B.O.D. in industrial effluents, waste and water
- Provided with plastic cap to avoid vapours
- Individual number printed on the bottle

Product Code	Capacity ml	Approx O. D. x Height* mm	Quantity Per Case
1250013	60**	42 x 100	10
1250017	125*	55 x 120	10
1250A22	300	70 x 143	30

*Height indicated is of Bottle only

** 60 & 125 ml are not covered in standards

300 ml is for determination of B.O.D. in Industrial effluents, wastes and water as per method specified by the American Public Health Association and is numbered individually.

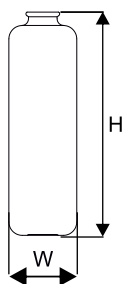
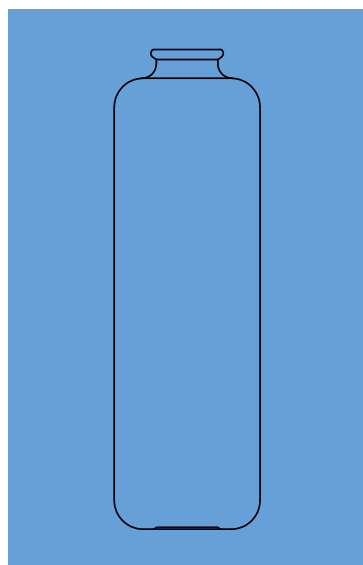


1290 - ROUX BOTTLES

Bottles Off-Set Neck

- Complies with IS 6942
- The offset neck is tool-finished for greater strength and uniform stopper fit
- These bottles facilitate the growing of mass cultures and single or monolayer cultures
- It withstands repeated sterilisation (wet or dry)

Product Code	Capacity ml	Approx B x W x H mm	Approx Neck I. D. mm	Quantity Per Case
1290029	1000	126 x 56 x 265	26	20



1296 - Povitsky Bottles

Designed for the preparation of toxins and general tissue culture work

- Rectangular cross section with an offset neck
- Manufactured by 3.3 expansion low borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements

Product Code	Capacity ml	Approx B x W x H mm	Approx Neck I. D. mm	Quantity Per Case
1296033	5000	152 x 118 x 505	43	1

Borosil Reagent Bottles

Borosil Laboratory bottles are chemically resistant and stable. When fitted with a plastic pouring ring dripping can be totally eliminated. As there is only one size of screw thread for all bottles from 100 ml onwards, the screw caps and pouring rings are fully interchangeable. The bottles, pouring rings and caps are autoclavable and sterilizable.

Properties :

Light protection :

- Amber bottles : Protects media from light radiation with a wave-length between 300 nm and 500 nm

Safe closure ensures storage of products such as

- Dairy products
- Serums

High resistance to thermal shock (upto 140°C)

HANDLING :

Sterilization :

Bottles can be steam sterilized after washing. Following are recommendation and guidelines.

- Soiled bottle must be cleaned first, otherwise microorganism cannot be effectively destroyed and chemicals adhering to surface can damage it as a result of high temperature involved.

- To prevent pressure build in bottle, the screw cap should be left loose on the bottle neck (one turn maximum). It should not be closed tight as the pressure built up at higher temperatures should be released to prevent the bottle from breakage.
- Ensure that saturated steam is used and that it has unhindered access to all contaminated places. This is the only way to achieve effective steam sterilization.

Thawing frozen substances :

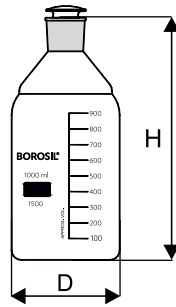
The frozen material can be thawed by immersing the bottle in liquid bath taking care that the temperature difference does not exceed 100 degree C. This will ensure that the frozen material is heated uniformly from all sides without damaging the bottle. It can however also be thawed slowly so that the surface melts first, allowing the material to expand.

Freezing substances

Recommendation: When freezing, always place the bottles at an angle approx. 45°C and do not fill to more than capacity (to increase surface area). Temperature limit - 40°C as the plastic caps and pouring ring do not withstand lower temperatures.

Borosil laboratory bottles are widely used because of consistent performance & better quality.





1500 - REAGENT BOTTLES

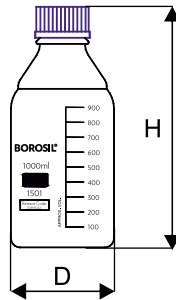
Plain Narrow Mouth, Graduated with Inter-changeable Flat Head Stopper

- Complies with IS 1388 (Part II), EN ISO 4796 - 2
- These narrow mouth reagent storage bottles have a sturdy ground neck
- All sizes have a durable matt-finished enamelled area for marking
- These bottles are mechanically strong and chemical resistant
- Supplied with solid glass stopper

Product Code	Capacity ml	Approx O.D. x Height mm	Neck Stopper Size	Quantity Per Case
1500013	60**	45 x 100	14 / 23	40
1500016	100	56 x 105	14 / 23	10
1500017	125**	56 x 145	19 / 26	50
1500021	250	70 x 145	19 / 26	10
1500024	500	86 x 180	24 / 29	10
1500029	1000	100 x 230	29 / 32	10
1500030	2000	136 x 255	34 / 35	10

- *Height indicated is of Bottle only

- ** 60 & 125 ml is not covered in standards



1501 - REAGENT BOTTLES

Graduated With Screw Cap and Pouring Ring

- Complies with IS 1388 (Part I), EN ISO 4796 - 1
- These bottles are mechanically strong and chemical resistant
- Designed with plastic pouring ring for drip-free operation
- The screw caps and pouring ring are made of PP
- The bottles, screw caps and pouring rings can be sterilized and autoclavable
- Printed with a Retrace Code
- 100 ml to 20000 ml Bottles have uniform GL 45 thread

Product Code	Capacity ml	Approx O.D. x Height* mm	Thread Specification	Quantity Per Case
1501006	10**#	36 X 50	GL 25	10
1501009	25#	36 x 70	GL 25	20
1501012	50	46 x 87	GL 32	20
1501016	100	56 x 100	GL 45	10
1501018	150**#	60 x 120	GL 45	10
1501021	250	70 x 140	GL 45	10
1501024	500	86 x 176	GL 45	10
1501029	1000	101 x 225	GL 45	10
1501030	2000	136 x 260	GL 45	10
1501031	3000**	158 x 295	GL 45	2
1501033	5000***	183 x 323	GL 45	1
1501038	10000***	235 x 405	GL 45	1
1501040	20000***	296 x 500	GL 45	1

- *Height indicated is of Bottle only

- # Without Pouring Ring

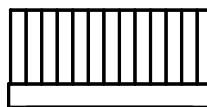
- ** Not covered in any standard

- *** As per Borosil Dimension

1503 - SCREW CAP

with Pouring ring for Screw Cap Bottles

- Caps and pouring rings are made of PP (Polypropylene) and are auto-clavable upto 140C

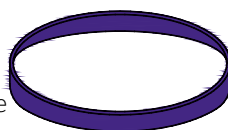


Product Code	Colour Description	Thread Specification	Quantity Per Case
1503C01	Blue	GL 45	10
1503C02	Orange	GL 45	10
1503C03	Yellow	GL 45	10
1503C04	Green	GL 45	10
1503C05	Grey	GL 45	10
1503C06	Blue	GL 25	10
1503C07	Blue	GL 32	10
1503C08	Blue	GL 36	10

1504 - POURING RING

Blue Colour

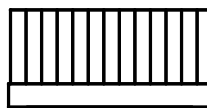
- Pouring rings are made of PP (Polypropylene) and are autoclavable



Product Code	Colour Specification	Thread Specification GL	Quantity Per Case
1504R01	Blue	GL - 45	10

1505 - RED SCREW CAP

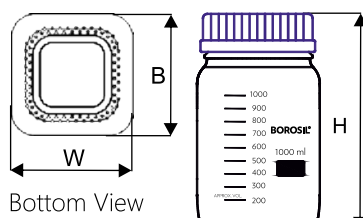
with Pouring ring for Laboratory bottles, auto-clavable upto 200C



Product Code	Colour Specification	Thread Specification	Quantity Per Case
1505C01	Red	GL - 45	10

1506 - REAGENT BOTTLES

Square with DIN Thread, Graduated, with PP Screw Cap (GL 80) and PP Pouring Ring



Product Code	Capacity ml	Approx B x W x H mm	Thread Specification Approx O.D. mm	Quantity Per Case
1506024	500	94 x 94 x 141	GL-80	10
1506029	1000	105 x 105 x 187	GL-80	10
1506030	2000	115 x 115 x 260	GL-80	10
1506033	5000	160 x 160 x 357	GL-80	1

*Height indicated is of Bottle only

Amber colour bottles are available on request.



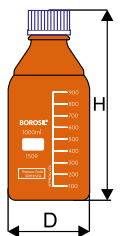
1509 - REAGENT BOTTLES

With I/C stopper **Amber**

- Complies with IS 1388 (Part II), EN ISO 4796 - 2
- These narrow mouth reagent storage bottles have a sturdy ground neck
- All sizes have a durable matt-finished enamelled area for marking
- These bottles are mechanically strong and chemical resistant
- The uniform Amber colour is highly durable and has high chemical resistance
- Properties within the bottle remain unchanged, as the colour is applied only on the external surface
- Protects media from light radiation with a wave-length between 300 nm and 500 nm
- Ideal for use with light-sensitive media and for the long-term storage of substances
- Supplied with solid glass stopper

Product Code	Capacity ml	Approx O.D. x Height* mm	Neck Stopper Size	Quantity Per Case
1509013	60**	40 x 100	14 / 23	20
1509016	100	56 x 105	14 / 23	10
1509017	125**	56 x 120	19 / 26	20
1509021	250	70 x 145	19 / 26	10
1509024	500	86 x 182	24 / 29	10
1509029	1000	101 x 230	29 / 32	5
1509030	2000	136 x 255	34 / 35	5

- *Height indicated is of Bottle only - ** 60 & 125 ml is not covered in standards
- Similar in design to cat no. 1500



1519 - REAGENT BOTTLES

With screw cap & pouring ring, **Amber**

- Complies with IS 1388 (Part I), EN ISO 4796 - 1
- These bottles are mechanically strong and chemical resistant
- Designed with plastic pouring ring for drip-free operation
- The screw caps and pouring are made of PP and autoclavable
- Printed with a Retrace Code
- The uniform Amber colour is highly durable and has high chemical resistance
- Properties within the bottle remain unchanged, as the colour is applied only on the external surface
- Ideal for use with light-sensitive media and for long-term storage of substances
- 100 ml to 20000 ml have uniform GL 45 thread

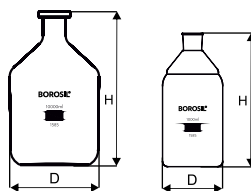
Product Code	Capacity ml	Approx O.D. x Height* mm	Thread Specification	Quantity Per Case
1519006	10**	36 x 50	GL 25	10
1519009	25#	36 x 70	GL 25	20
1519012	50#	46 x 87	GL 32	20
1519016	100	56 x 100	GL 45	10
1519021	250	70 x 140	GL 45	10
1519024	500	86 x 176	GL 45	10
1519029	1000	101 x 225	GL 45	10
1519030	2000	136 x 260	GL 45	10
1519031	3000**	158 X 295	GL 45	2
1519033	5000***	183 x 323	GL 45	1
1519038	10000**	235 x 405	GL 45	1
1519040	20000***	296 x 500	GL 45	1

Without Pouring rings
**Not covered in any standard
***As per BOROSIL dimensions

1585 - TOOLED NECK BOTTLES

Solution Bottle, Plain

- These bottles are mechanically strong and chemical resistant
- 10, 20 & 50 litre bottles specially designed for handling and storing culture media
- All sizes have a durable matt-finished enamelled area for marking



Product Code	Capacity ml	Approx O.D. x Height mm	Approx Neck I. D. mm	Quantity Per Case
1585021	250	70 x 145	18	20
1585024	500	86 x 180	23	20
1585029	1000	101 x 230	28	10
1585030	2000	136 x 285	33	10
1585031	3000	158 x 255	44	4
1585033	5000	183 x 330	44	1
1585038	10000 [#]	235 x 430	54	1
1585040	20000 [#]	296 x 530	54	1
1585046	50000	417 x 665	89	1

1589 - TOOLED NECK BOTTLES

Solution Bottle, Amber

- These bottles are mechanically strong and chemical resistant
- All sizes have a durable matt-finished enamelled area for marking
- The uniform Amber colour is highly durable and has high chemical resistance
- Properties within the bottle remain unchanged, as the colour is applied only on the external surface
- Protects media from light radiation with a wave-length between 300 nm and 500 nm
- Ideal for use with light-sensitive media and for long-term storage of substances



Product Code	Capacity ml	Approx O.D. x Height mm	Approx Neck I. D. mm	Quantity Per Case
1589021	250	70 x 145	18	10
1589024	500	86 x 180	23	20
1589029	1000	101 x 230	28	5
1589030	2000	136 x 255	33	5

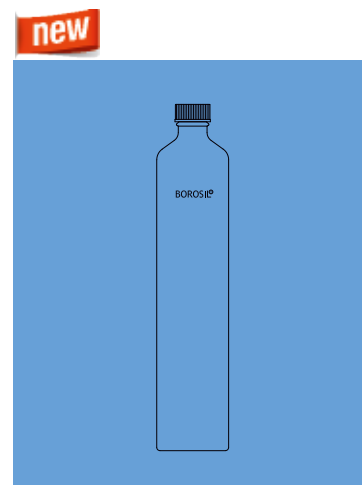
Similar in design to Cat No. 1585

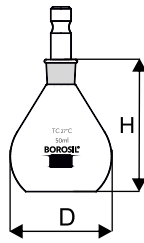
For Higher Capacities please contact our Sales Offices or our Authorised Dealers

1600 - Roller Bottle

Screw Cap GL 45 with Pouring Ring

Product Code	Capacity	Approx O. D. x Height in mm	Quantity Per Case
1600030	2000 ml	110 x 285	10

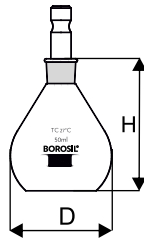




1624 - RELATIVE DENSITY BOTTLES With Capillary Bore Interchangeable Teflon Stopper

- These bottles are mechanically strong and chemical resistant
- All sizes have a durable matt-finished enamelled area for marking
- Comes with a Works Certificate

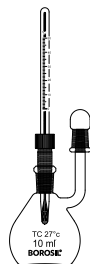
Product Code	Capacity ml	Capacity Tolerance +ml	Max. Body Dia x Height mm	Size of Inter-Changeable Stopper	Quantity Per Case
1624006	10	0.3	29 x 48	10 / 15	5
1624009	25	0.8	40 x 55	10 / 15	5
1624012	50	1.0	50 x 65	10 / 15	5



1625 - RELATIVE DENSITY BOTTLES With Capillary Bore Inter-changeable Teflon stopper

- Complies with IS 5717, DIN / ISO 3507
- These bottles are mechanically strong and chemical resistant
- All sizes have a durable matt-finished enamelled area for marking

Product Code	Capacity ml	Capacity Tolerance +ml	Max. Body Dia x Height mm	Size of Inter-Changeable Stopper	Quantity Per Case
1625006	10	1	29 x 48	10 / 15	10
1625009	25	2	40 x 55	10 / 15	10
1625012	50	3	50 x 65	10 / 15	5



1627 - GRAVITY SPECIFIC BOTTLE With thermometer (Pyknometer)

- Complies with IS 5717, DIN / ISO 3507
- These bottles are mechanically strong and chemical resistant
- All sizes have a durable matt-finished enamelled area for marking
- Supplied with thermometer alongwith certificate for thermometer

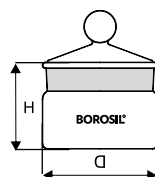
Product Code	Capacity ml	Quantity Per Case
1627006	10	5
1627009	25	5
1627012	50	5

Suitable for determining the density with built in thermometer & thermometer pocket.

1630 - WEIGHING BOTTLES

With Interchangeable Lids

- Complies with IS 1574
- These bottles are mechanically strong and chemical resistant



Product Code	Capacity ml	Approx O.D. x Height* mm	Quantity Per Case
1630005	5	20 x 40	30
1630007	15	25 x 65	10
1630008	20**	50 x 35	10
1630009	25	30 x 65	10
1630011	40**	60 x 40	10
1630013	60	40 x 90	5

*Height indicated is of Bottle only

**Squat Form

1631 - WEIGHING BOTTLES

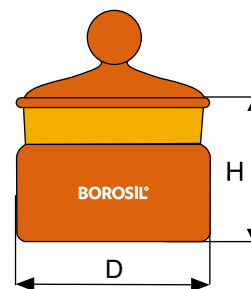
With Interchangeable Lids, Amber

- Complies with IS 1574
- These bottles are mechanically strong and chemical resistant
- Suitable for light sensitive substance.

Product Code	Capacity ml	Approx O.D. x Height* mm	Quantity Per Case
1631005	5	20 x 40	30
1631007	15	25 x 65	10
1631008	20	50 x 35	10
1631009	25	30 x 65	10
1631011	40	60 x 40	10
1631013	60	40 x 90	5

*Height indicated is of Bottle only

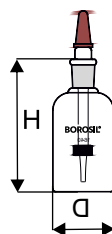
**Squat Form



1640 - DROPPING BOTTLES

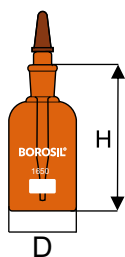
With Dropper & Rubber Teat

- Made from 3.3 borosilicate glass
- Highly chemical resistance
- Supplied with interchangeable ground joint transparent pipette with rubber teat



Product Code	Capacity ml	Approx O.D. x Height mm	Socket Size	Quantity Per Case
1640010	30	35 x 84	14 / 19	10
1640013	60	42 x 100	14 / 19	10
1640017	125	55 x 120	19 / 26	10
1640021	250	65 x 147	19 / 26	10



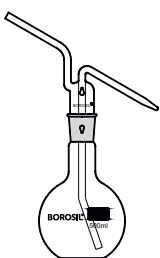


1650 - DROPPING BOTTLES

With Pipette & Rubber Teat, **Amber**

- Made from 3.3 borosilicate glass
- Highly chemical resistance
- Supplied with interchangeable ground joint Amber pipette with rubber teat
- Ideal for light sensitive materials

Product Code	Capacity ml	Approx O.D. x Height mm	Socket Size	Quantity Per Case
1650010	30	35 x 84	14 / 19	10
1650013	60	42 x 100	14 / 19	10
1650017	125	55 x 120	19 / 26	10
1650021	250	65 x 147	19 / 26	10

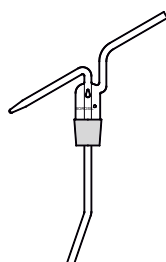


1660 - WASH BOTTLES

Set with Interchangeable Stopper

- These bottles are mechanically strong and chemical resistant
- All sizes have a durable matt-finished enamelled area for marking

Product Code	Capacity ml	Size of Inter-changeable Stopper	Quantity Per Case Set
1660021	250	24 / 29	5
1660024	500	24 / 29	5
1660029	1000	29 / 32	5



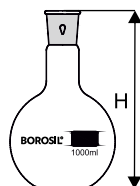
1661 - STOPPERS

For Wash Bottles Cat. No. 1660

Product Code	Capacity ml	Size of Inter-changeable Stopper	Quantity Per Case
1661021	250	24 / 29	5
1661024	500	24 / 29	5
1661029	1000	29 / 32	5

1662 - FLASKS

For Wash Bottles Cat No. 1660

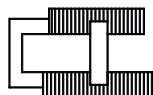


Product Code	Capacity ml	Approx Height mm	Size of Interchangeable Stopper	Quantity Per Case
1662021	250	130	24 / 29	5
1662024	500	160	24 / 29	5
1662029	1000	195	29 / 32	5

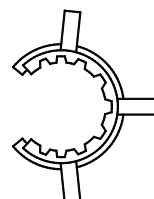


1665 - PLASTIC CLAMP

for Joint Fittings



Product Code	Joint mm	Quantity Per Case
1665B14	B 14	10
1665B19	B 19	10
1665B24	B 24	10
1665B29	B 29	10

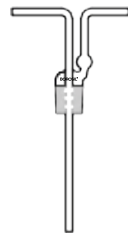




1760 - GAS WASHING (DRESCHER) BOTTLES, Set with Interchangeable Stopper

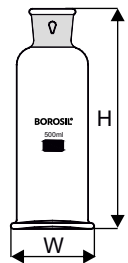
- Complies with IS 11990
- These bottles are mechanically strong and chemical resistant
- All sizes have a durable matt-finished enamelled area for marking

Product Code	Capacity ml	Size of Inter-changeable Stopper	Quantity Per Case Set
1760017	125	29 / 32	5
1760021	250	29 / 32	5
1760024	500	29 / 32	5



1761 - STOPPERS For Gas Washing Bottles

Product Code	Capacity ml	Quantity Per Case
1761017	125	5
1761021	250	5
1761024	500	5



1762 - BOTTLES For Gas Washing Bottles

Product Code	Capacity ml	Approx O. D. x Height mm	Quantity Per Case
1762017	125	50 x 165	5
1762021	250	60 x 190	5
1762024	500	70 x 245	5

1764 - GAS SAMPLING TUBES, With Stopcocks

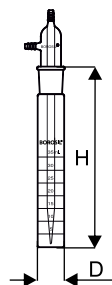


Product Code	Capacity ml	Quantity Per Case
1764017	125	10
1764021	250*	10
1764024	500	10
1764029	1000	10

*Not covered in standards

1765 - IMPINGER

- Complies with IS 5182 (Part-VI)
- These bottles are mechanically strong and chemical resistant



Product Code	Capacity ml	Approx O. D. x Height mm	Quantity Per Case Set
1765058	35	26 x 220	10

Burettes

- Manufactured from 3.3 Low Expansion Borosilicate I.D. control tubing.
- Individually calibrated by automatic calibration process
- Stringent quality control through all steps to eliminate possible deviations from nominal volume
- Individual certificate can be downloaded from our website
- Graduation and inscriptions are printed with white enamel
- Comes with highest quality standards according to **IS 1997** and **ISO 385**
- Supplied with PTFE stopcock, Boroflo stopcock and Straight Bore Glass Stopcock



Accuracy, reliability and durability are the essentials of a Burette. Only Borosil branded Burettes offer you these three benefits even after repeated usage, as they are made with a combination of the best material and workmanship. The highest quality accurate bore tubing is selected to provide uniform and accurate graduations. Each burette is individually calibrated on a fully automatic machine for precision and high accuracy. All graduations are marked in durable white enamel. The stopcock plugs are not interchangeable.

In addition to Burettes with glass stopcocks, Borosil offers Burettes with straight bore PTFE stopcocks and a range of Boroflo Burettes fitted with Boroflo (GP) screw thread stopcocks with PTFE keys.

Boroflo Burettes fitted with Boroflo GP (General Purpose) screw thread stopcocks with PTFE keys offer the following operational advantages :

- Lubrication is never required, ensuring no seizure and no contaminating greases.
- Excellent flow control that is important for Burettes
- All-glass / PTFE pathway, highly resistant to chemical attack
- The unique Fluon / glass seal ensures no leakage
- No springs or retaining devices makes it easy to dismantle and clean them
- Absence of ground surfaces results in low absorption of radioactivity
- Consistent performance between 0°C and 50°C

Borosil offers Class A Burette for accurate work



- Boroflo stopcocks have PTFE keys which do not require greasing
- The PTFE keys provide best drop control during titration process
- Due to identical shape of PTFE key it Burette valve can be closed with gentle turn.
- PTFE stopcocks have identical keys, hence matching the pairs is not required during cleaning
- PTFE is self lubricating hence keys do not require greasing
- Specially designed solid glass stopcocks are manufactured from 3.3 Low expansion borosilicate glass
- Glass stopcocks are perfectly ground , hence no leakage occurs.



2121 - BURETTES BOROLLO

Burettes, Fitted with Boroflo GP (General Purpose), Screw Thread with PTFE Keys, Accuracy as per Class A of IIS 1997:2008/EN ISO 385, with Certificate

- Generally used in Titration process
- Comes with Boroflo with PTFE key that is highly resistant to chemical attack
- No need to lubricate it as PTFE key is used

Product Code		Capacity ml	Graduation Interval ml	Tolerance \pm ml	Quantity Per Case
Batch Certified	Individually Certified				
2121006A	2121006D	10	0.05	0.03	5
2121009A	2121009D	25	0.10	0.05	5
2121012A	2121012D	50	0.10	0.05	5
2121016A	2121016D	100	0.20	0.10	5

* Accuracy as per ASTM E 287-2

2121- BURETTES BOROFLO ASTM

Burettes, Boroflo, Accuracy as per Class A of ASTM E287, with certificate

- Generally used in Titration process
- Comes with Boroflo with PTFE key that is highly resistant to chemical attack
- No need to lubricate it as PTFE key is used

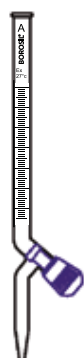
Product Code		Capacity ml	Graduation Interval ml	Tolerance \pm ml	Quantity Per Case
Batch Certified	Individually Certified				
2121U06A*	2121U06D*	10	0.05	0.02	5
2121U09A*	2121U09D*	25	0.10	0.03	5

2122 - BURETTES BOROFLO

Fitted With Boroflo GP (General Purpose), Screw Thread with PTFE Keys, Accuracy as per Class B of IS 1997:2008/EN ISO 385

- Generally used in Titration process
- Comes with Boroflo with PTFE key that is highly resistant to chemical attack
- No need to lubricate it as PTFE key is used

Product Code	Capacity ml	Graduation Interval ml	Tolerance \pm ml	Quantity Per Case
2122006D	10	0.05	0.05	10
2122009D	25	0.10	0.10	10
2122012D	50	0.10	0.10	10
2122016D	100	0.20	0.20	10



2123 - BURETTES

Straight Bore Glass Stopcock, Accuracy as per Class A of IS 1997:2008/EN ISO 385, with Certificate

- Generally used in Titration process
- Designed with straight bore stopcock that increases the life, compared to PTFE key stopcocks
- The glass stopcock enhances control and enables smoother action
- The tolerance conforms to Class A of IS and ISO

Product Code		Capacity ml	Graduation Interval ml	Tolerance \pm ml	Quantity Per Case
Batch Certified	Individually Certified				
2123005A	2123005D	5	0.02	0.01	5
2123006A	2123006D	10	0.05	0.03	5
2123009A	2123009D	25	0.1	0.05	5
2123012A	2123012D	50	0.1	0.05	5
2123016A	2123016D	100	0.2	0.1	5

2124 - BURETTES

Straight Bore Glass Stopcock, Accuracy as per Class B of IS 1997:2008/EN ISO 385

- Generally used in Titration process
- Designed with straight bore stopcock that increases the life, compared to PTFE key stopcocks
- The glass stopcock enhances control and enables smoother action
- The tolerance conforms to Class B of IS and ISO

Product Code	Capacity ml	Graduation Interval ml	Tolerance \pm ml	Quantity Per Case
2124005D	5	0.02	0.02	5
2124006D	10	0.05	0.05	10
2124009D	25	0.10	0.10	10
2124012D	50	0.10	0.10	5
2124016D	100	0.20	0.20	5





2129 - BURETTES

Straight Bore Stopcock PTFE Key Stopcock, Accuracy as per Class A of IS 1997:2008/EN ISO 385, with Certificate

- Generally used in Titration process
- Comes with PTFE key that is highly resistant to chemical attack
- No need to lubricate it as PTFE key is used

Product Code		Capacity ml	Graduation Interval ml	Tolerance \pm ml	Quantity Per Case
Batch Certified	Individually Certified				
2129006A	2129006D	10	0.05	0.03	5
2129009A	2129009D	25	0.1	0.05	5
2129012A	2129012D	50	0.1	0.05	5
2129016A	2129016D	100	0.2	0.1	5

- Burettes of other capacities are on request

2129U - BURETTES, ASTM

Burettes ASTM, Straight Bore Stopcock, PTFE Key STOPCOCK, Accuracy as per Class A of ASTM E287, with certificate

Product Code		Capacity ml	Graduation Interval ml	Tolerance \pm ml	Quantity Per Case
Batch Certified	Individually Certified				
2129U06A	2129U06D	10	0.05	0.02	5
2129U09A	2129U09D	25	0.10	0.03	5

2130 - BURETTES

Straight Bore Stopcock PTFE Key Stopcock, Accuracy as per Class B of IS 1997:2008/EN ISO 385

- Generally used in Titration process
- Comes with PTFE key that is highly resistant to chemical attack
- No need to lubricate it as PTFE key is used
- The volume content tolerance conforms to Class B of IS and ISO

Product Code	Capacity ml	Graduation Interval ml	Tolerance \pm ml	Quantity Per Case
2130006D	10	0.05	0.05	5
2130009D	25	0.10	0.05	5
2130012D	50	0.10	0.1	5
2130016D	100	0.20	0.20	5

- Burettes of other capacities are on request



NABL
CERTIFIED

2003 - Burettes, Straight Bore Stopcock, PTFE key stopcock Accuracy as per class A, ISO 385, with Certificate, NABL Certified

- Complies with IS 1997, EN ISO 385

Product Code	Capacity ml	Graduation Interval	Tolerance \pm ml	Quantity Per Case
2003006	10	0.1	0.05	5
2003009	25	0.1	0.05	5
2003012	50	0.1	0.05	5
2003016	100	0.1	0.05	5

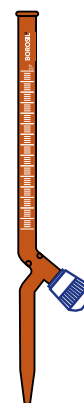
* NABL certified product for **AMBER** Burette can be provided on request.

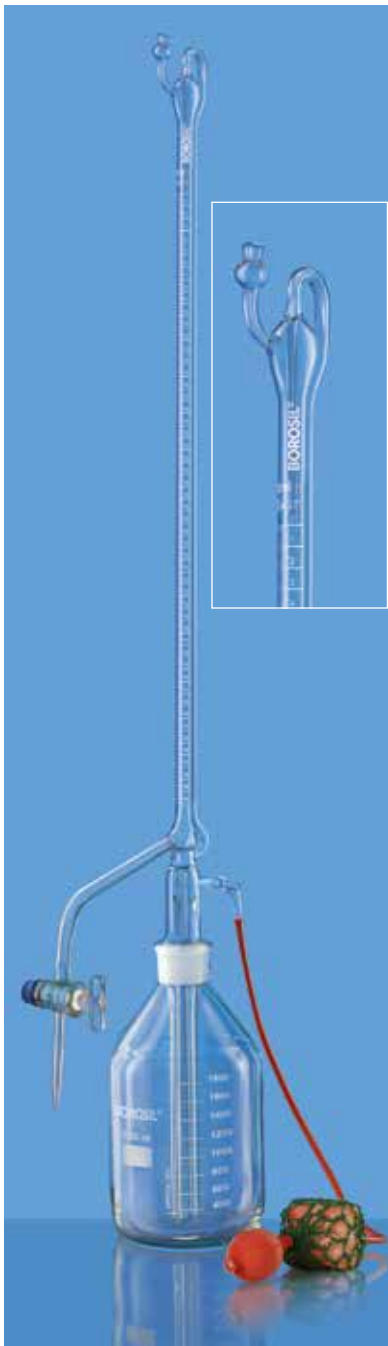
2131 - BURETTES

Boroflo, Fitted With Boroflo GP (General Purpose), Screw Thread Stopcock With PTFE Keys, Accuracy as per Class A of IS 1997:2008/EN ISO 385, with Certificate, **Amber**

- Generally used in Titration process
- Comes with PTFE key that is highly resistant to chemical attack
- No need to lubricate it as PTFE key is used
- The volume content tolerance conforms to Class A of IS and ISO
- Amber colour is applied to the external surface to prevent contamination with the testing material

Product Code		Capacity ml	Graduation Interval ml	Tolerance ±ml	Quantity Per Case
Batch Certified	Individually Certified				
2131009A	2131009D	25	0.1	0.05	5
2131012A	2131012D	50	0.1	0.05	5





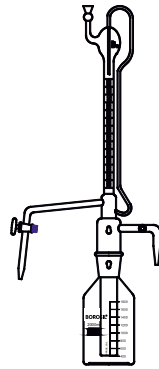
2149-BURETTES

Automatic Zero, Accuracy as per Class A of IS 1997:2008/EN ISO 385, with Reservoir, Rubber Bellow, Glass Stopcock, With Certificate

- Complies with IS 1997, EN ISO 385
- With automatic zero facility
- Individually tested for exact volume dispensed at 3 points on the scale
- Alpha numeric serial number on the article and certificate provide complete traceability
- Simple operation
 - To fill Burette apply a slight positive pressure to lower side arm
 - To set zero, release pressure to allow excess liquid to siphon back into the bottle
- Burettes manufactured from chemically resistant 3.3 borosilicate glass
- White enamel graduations
- With Glass stopcock

Product Code	Capacity ml	Graduation Interval ml	Tolerance \pm ml	Quantity Per Case
2149006D	10	0.05	0.03	1
2149009D	25	0.10	0.05	1
2149012D	50	0.10	0.05	1
2149016D	100	0.20	0.10	1

Reservoir Capacity : 500 ml for 10 ml size and 2000 ml for 25, 50 and 100 ml sizes.



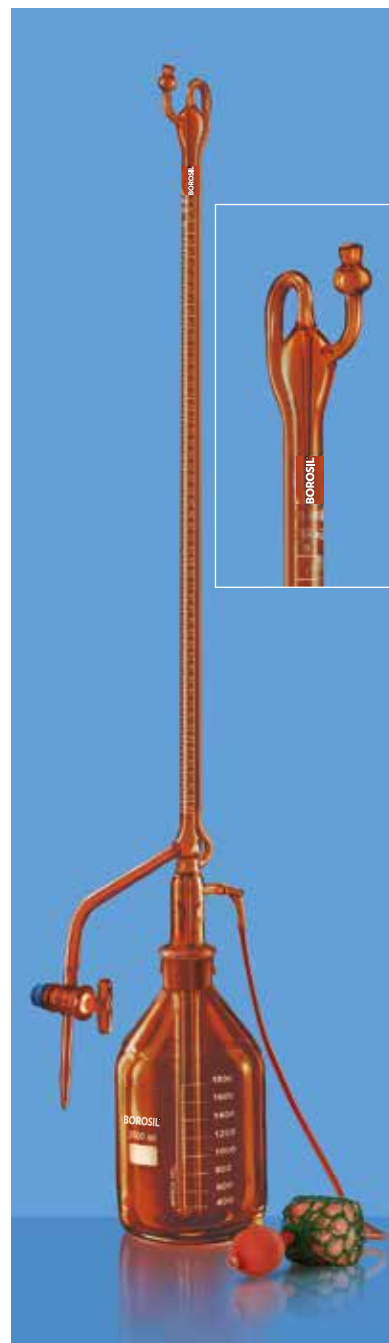
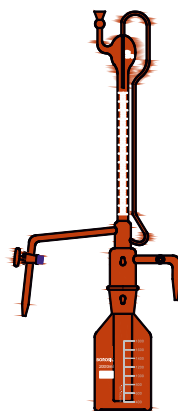
2149A - BURETTES

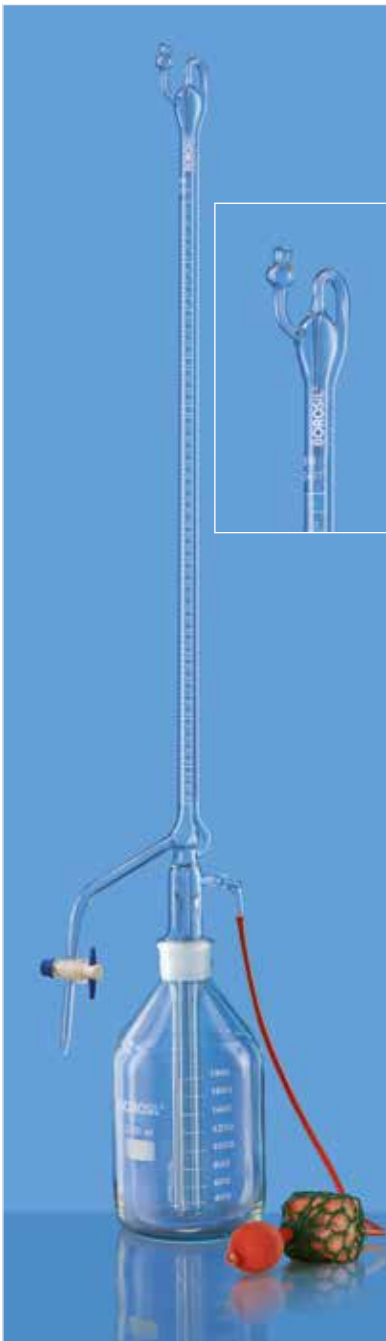
Automatic Zero, Accuracy as per Class A of IS 1997:2008/EN ISO 385, with Reservoir, Rubber Bellow, Glass Stopcock, **Amber** With Certificate

- Complies with IS 1997, EN ISO 385
- With automatic zero facility
- Individually tested for exact volume dispensed at 3 points on the scale
- Alpha numeric serial number on the article and certificate provide complete traceability
- Simple operation
 - To fill Burette apply a slight positive pressure to lower side arm
 - To set zero, release pressure to allow excess liquid to siphon back into the bottle
- Burettes manufactured from chemically resistant 3.3 borosilicate glass
- White enamel graduations
- With Glass stopcock

Product Code	Capacity ml	Graduation Interval ml	Tolerance \pm ml	Quantity Per Case
2149A06D	10	0.05	0.03	1
2149A09D	25	0.10	0.05	1
2149A12D	50	0.10	0.05	1
2149A16D	100	0.20	0.10	1

Reservoir Capacity : 500 ml for 10 ml size and 2000 ml for 25, 50 and 100 ml sizes.





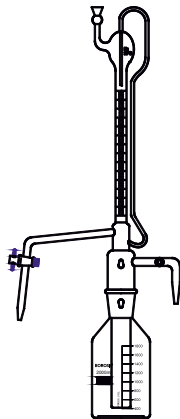
2153 - BURETTES

Automatic Zero, Accuracy as per Class A of IS 1997:2008/EN ISO 385, with Reservoir, Rubber Bellow, PTFE Stopcock, with Certificate

- Complies with IS 1997, EN ISO 385
- With automatic zero facility
- Individually tested for exact volume dispensed at 3 points on the scale
- Alpha numeric serial number on the article and certificate provide complete traceability
- Simple operation
 - To fill Burette apply a slight positive pressure to lower side arm
 - To set zero, release pressure to allow excess liquid to siphon back into the bottle
- Burettes manufactured from chemically resistant 3.3 borosilicate glass
- White enamel graduations
- With PTFE stopcock

Product Code	Capacity ml	Graduation Interval ml	Tolerance \pm ml	Quantity Per Case
2153006D	10	0.05	0.03	1
2153009D	25	0.10	0.05	1
2153012D	50	0.10	0.05	1
2153016D	100	0.20	0.10	1

Reservoir Capacity : 500 ml for 10 ml size and 2000 ml for 25, 50 and 100 ml sizes.



Reservoir Capacity : 500 ml for 10 ml size and 2000 ml for 25, 50 and 100 ml sizes.

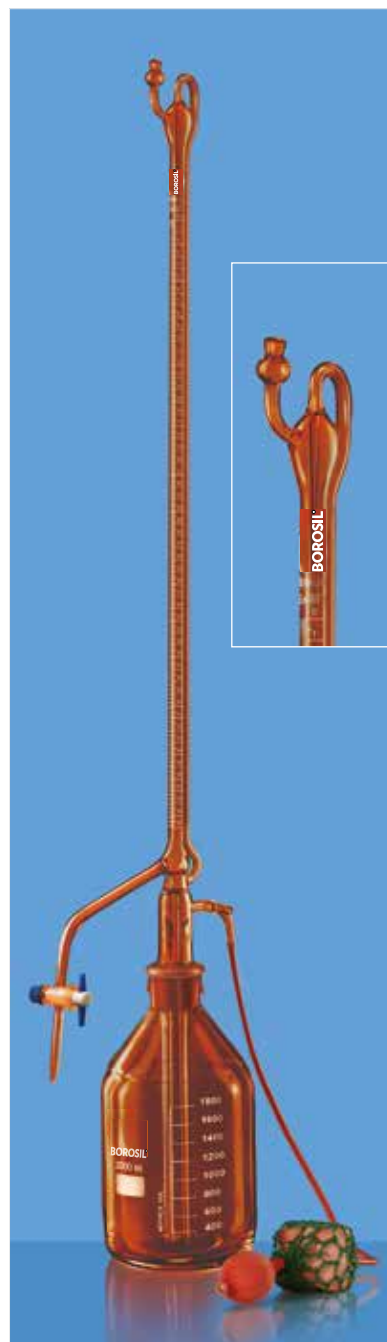
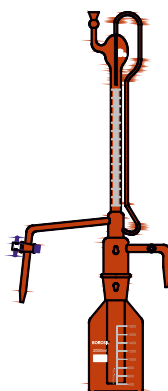
2153A - BURETTES

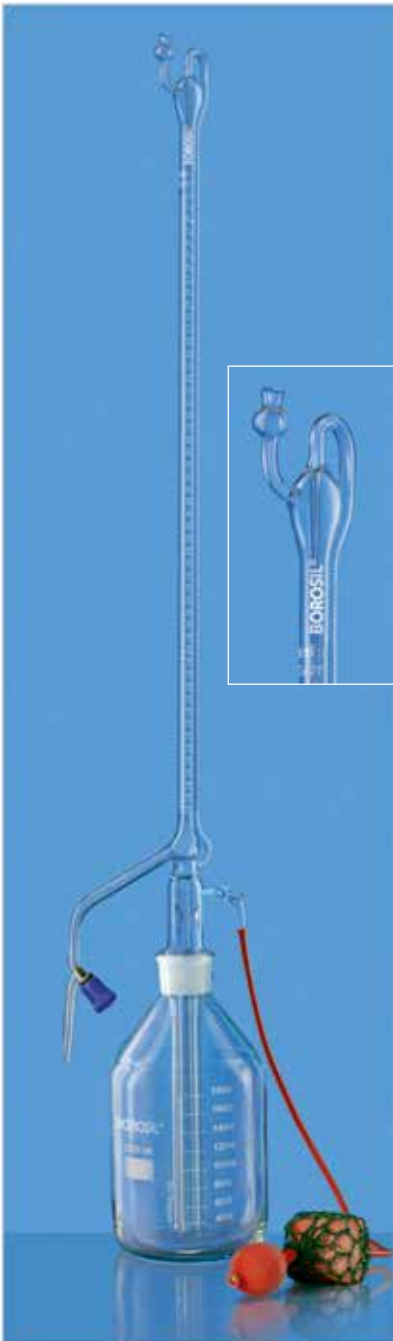
Automatic Zero, Accuracy as per Class A of IS 1997: 2008/EN ISO 385, with Reservoir, Rubber Bellow, PTFE Stopcock, **Amber** With Certificate

- Complies with IS 1997, EN ISO 385
- With automatic zero facility
- Individually tested for exact volume dispensed at 3 points on the scale
- Alpha numeric serial number on the article and certificate provide complete traceability
- Simple operation
 - To fill Burette apply a slight positive pressure to lower side arm
 - To set zero, release pressure to allow excess liquid to siphon back into the bottle
- Burettes manufactured from chemically resistant 3.3 borosilicate glass
- White enamel graduations
- With PTFE stopcock

Product Code	Capacity ml	Graduation Interval ml	Tolerance \pm ml	Quantity Per Case
2153A06D	10	0.05	0.03	1
2153A09D	25	0.10	0.05	1
2153A12D	50	0.10	0.05	1
2153A16D	100	0.20	0.10	1

Reservoir Capacity : 500 ml for 10 ml size and 2000 ml for 25, 50 and 100 ml sizes.





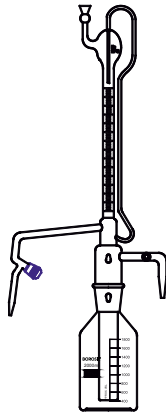
2155 - BURETTES

Automatic Zero, Accuracy as per Class A of IS 1997:2008/EN ISO 385, with Reservoir, Rubber Bellow and Boroflo Stopcock, With Certificate

- Complies with IS 1997, EN ISO 385
- With automatic zero facility
- Individually tested for exact volume dispensed at 3 points on the scale
- Alpha numeric serial number on the article and certificate provide complete traceability
- Simple operation
 - To fill Burette apply a slight positive pressure to lower side arm
 - To set zero, release pressure to allow excess liquid to siphon back into the bottle
- Burettes manufactured from chemically resistant 3.3 borosilicate glass
- White enamel graduations
- With PTFE stopcock

Product Code	Capacity ml	Graduation Interval ml	Tolerance \pm ml	Quantity Per Case
2155006D	10	0.05	0.03	1
2155009D	25	0.10	0.05	1
2155012D	50	0.10	0.05	1
2155016D	100	0.20	0.10	1

Reservoir Capacity : 500 ml for 10 ml size and 2000 ml for 25, 50 and 100 ml sizes.

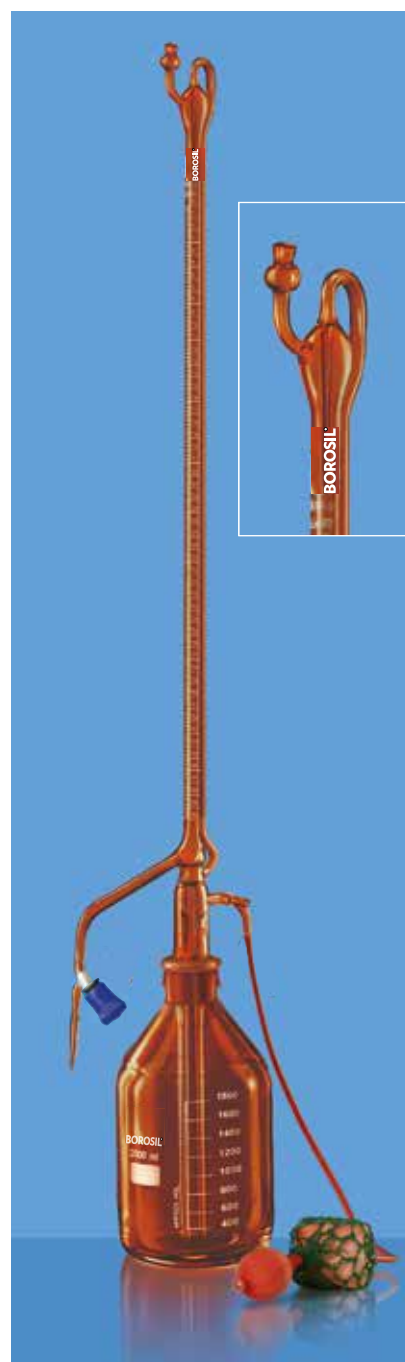
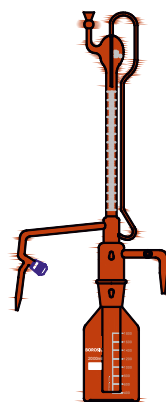


2155A - BURETTES

Automatic Zero, Accuracy as per Class A of IS 1997:2008/EN ISO 385, with Reservoir, Rubber Bellow and Boroflo Stopcock, **Amber** With Certificate

Product Code	Capacity ml	Graduation Interval ml	Tolerance \pm ml	Quantity Per Case
2155A06D	10	0.05	0.03	1
2155A09D	25	0.10	0.05	1
2155A12D	50	0.10	0.05	1
2155A16D	100	0.20	0.10	1

Reservoir Capacity : 500 ml for 10 ml size and 2000 ml for 25, 50 and 100 ml sizes.



Cones

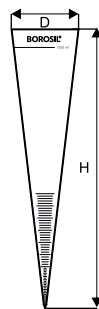
Cones are used to determine small amounts of suspended matter in sewage by the Imhoff Sedimentation Method.



2160 - CONES

Imhoff, Sediment, Sharp Tip

- Complies with IS 7232
- Graduated from 0 to 1 ml in 0.1 ml divisions
- Graduated from 1 to 10 ml in 0.5 ml divisions
- 10 to 40 ml in 1 ml divisions also marked at 1000 ml
- Facilitates the determination of the amount of sediment in sewage or industrial waste

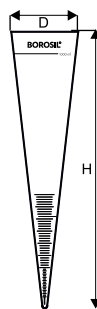


Product Code	Approx Total Height mm	Approx Top Diameter mm	Quantity Per Case
2160094	454	110	1

2180 - CONES

Imhoff, Sediment, Blunt Tip

- Complies with IS 7232
- The blunt tip increases its ruggedness and cleaning ease
- Ideal for use with heavy sediments where the ability to read small volumes is unimportant
- Facilitates the determination of the amount of sediment in sewage or industrial waste



Product Code	Approx Total Height mm	Approx Top Diameter mm	Quantity Per Case
2180093	439	110	1

Condensers

A Condenser is designed to facilitate the cooling of hot vapours and liquids. It is structured in the form of a large glass tube, containing a smaller glass tube running through its entire length. Hot fluids pass through this small inner tube.

Typically, the outer glass tube has two hose connections to aid the passing of a coolant (usually tap water or chilled water/anti-freeze mixture). The coolant is introduced through the lower fitting, while the higher fitting serves as the exit point. Entering the coolant at the cooler point is a critical aspect as it helps maintain a smooth and correctly directed thermal gradient. This in turn, maximises efficiency and minimises the risk of thermal shock to adjacent glassware. Multiple Condensers may be connected in a series. Usually, a high flow rate is not essential for maintaining a cooling surface.

Special care should be taken while choosing Condensers keeping in mind their distillation rates, reflux rates and temperature gradients.

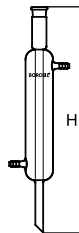
Borosil offers you the choice of a wide range of Condensers.



2340- CONDENSERS

Liebig, with sealed Inner Tube

- Simple design
- The light wall of the inner tube facilitates efficient heat transfer
- Low cooling capacity
- Used for distillate separation



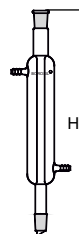
Product Code	Approx Jacket Length mm	Approx Overall Height mm	Ground Joint	Quantity Per Case
2340087	200	350	19 / 15	5
2340090	300	450	19 / 15	5
2340092	400	550	19 / 15	5
2340095	500	650	19 / 15	5



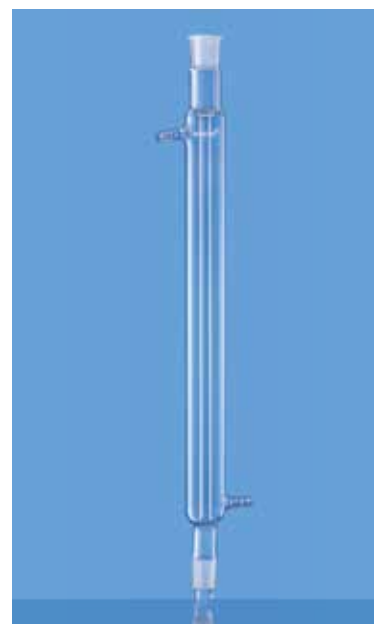
2400- CONDENSERS

Liebig, Drip Tip, Interchangeable Inner and Outer Joint

- Simple design
- The light wall of the inner tube facilitates efficient heat transfer
- Low cooling capacity
- Used for distillate separation



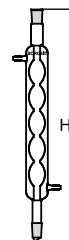
Product Code	Approx Jacket Length mm	Approx Overall Height mm	Ground Joint		Quantity Per Case
			Socket	Cone	
2400087	200	350	19 / 26	19 / 26	5
2400090	300	450	24 / 29	24 / 29	5
2400092	400	550	24 / 29	24 / 29	5



2480- CONDENSERS

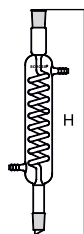
Allihn, Drip Tip, Interchangeable Inner and Outer Joint

- Greater surface area than the Liebig Condenser owing to a series of bulbs, resulting in higher cooling capacity
- Ideal for laboratory scale refluxing



Product Code	Approx Jacket Length mm	Approx Overall Height mm	Ground Joint		Quantity Per Case
			Socket	Cone	
2480087	200	330	19 / 26	19 / 26	5
2480090	300	450	24 / 29	24 / 29	5
2480092	400	550	24 / 29	24 / 29	5
2480096	600	750	29 / 32	29 / 32	5



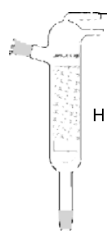


2560- CONDENSERS

Graham, Coiled Distillate Type, Drip Tip, Interchangeable Inner and Outer Joint

- The coiled condensation tubes result in greater surface area for cooling
- Designed with top standard taper outer and lower inner drip tip joint

Product Code	Approx Jacket Length mm	Approx Overall Height mm	Ground Joint		Quantity Per Case
			Socket	Cone	
2560090	300	450	24 / 29	24 / 29	5
2560092	400	550	24 / 29	24 / 29	5
2560095	500	650	24 / 29	24 / 29	5

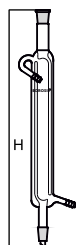


2640- CONDENSERS

Friedrichs, Drip Tip, Interchangeable Inner and Outer Joint

- Specially designed inner spiral tubes ensure along vapour path
- Offer better heat transfer and anti-flooding capabilities

Product Code	Approx Overall Height mm	Ground Joint		Quantity Per Case
		Socket	Cone	
2640097	350	24 / 29	24 / 29	5



2641 - Condensers

Double Surface

Product Code	Approx Jacket Length mm	Ground Joint	Quantity Per Case
2641087	200	19 / 26	5
2641187	200	24 / 29	5
2641090	300	19 / 26	5
2641190	300	24 / 29	5

The above condensers are widely used in research labs. A double-surface condenser has a water jacket both on the outside and through the centre of the condensing tube. It is needed where the condensed liquid is very volatile. Hence for distilling ethers, alcohols, esters, aromatics, petroleum products, and essential oils these condensers are widely used.

Classical Kjeldahl Digesters

Digestion Systems
for Labs



SAFE



SIMPLE



EFFICIENT



Proudly Made in India

Cylinders

Measuring cylinders serve simultaneously to receive and measure different amounts of liquids. Made from specially drawn 3.3 Borosilicate glass tubing with durable, easy to read graduations for assured accuracy.

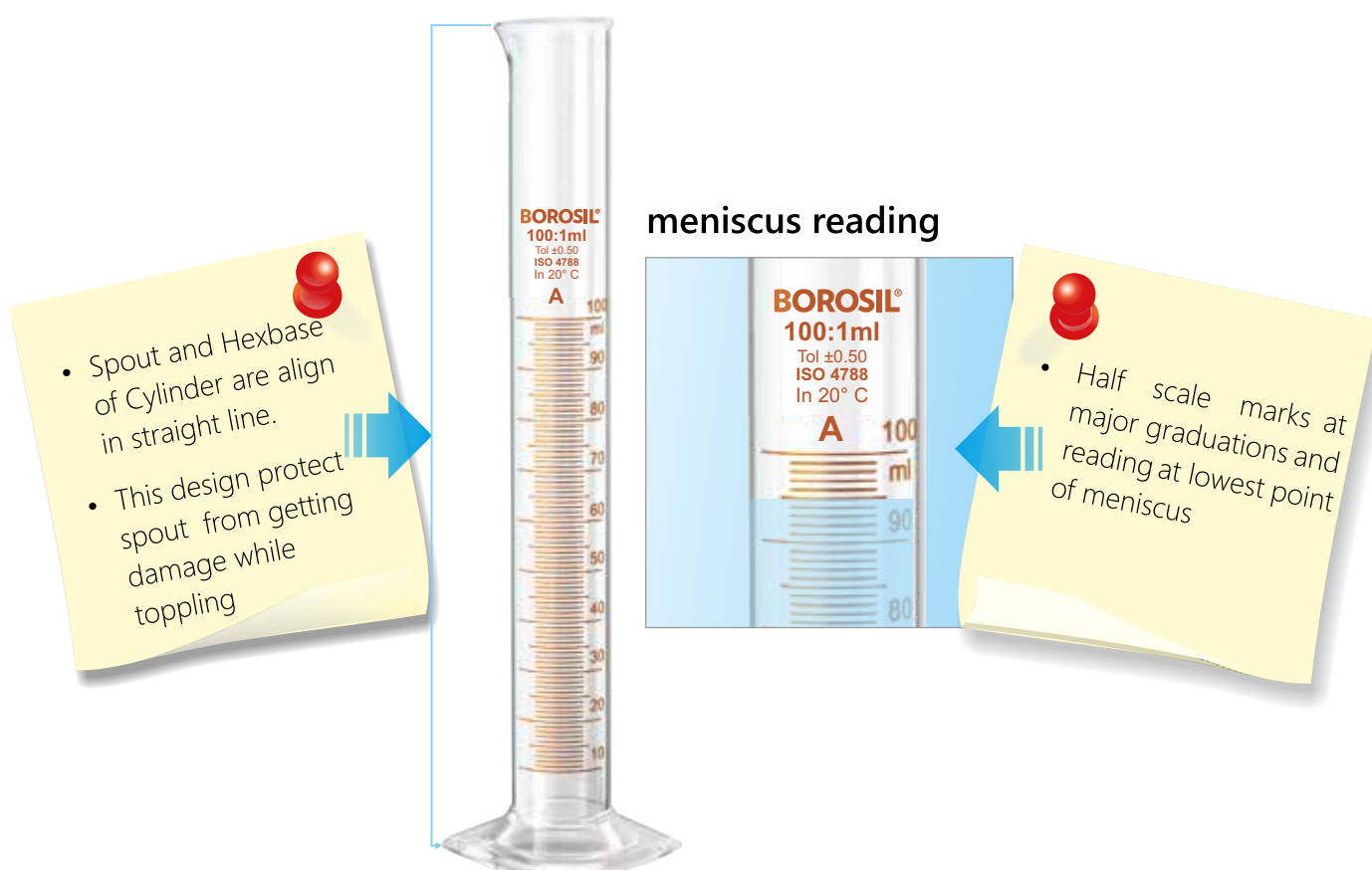
Borosil Brand Cylinders are built to last long. We have built strength features into every cylinder. Heavy uniform wall tubing and strong stable hexagonal base contribute to sturdiness. Hexagonal base also prevents them from rolling off a laboratory bench. They are available in capacities from 5 ml to 2000 ml.

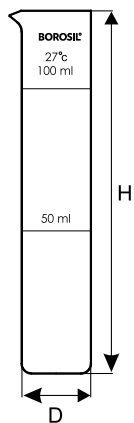
For accurate work, Class A certified cylinders are available.

Our range also includes Nessler Colour Comparison and Rain Measure Cylinders.



- Complies with highest quality standards according to IS 878 and EN ISO 4788
- Manufactured From 3.3 Low expansion borosilicate glass with precision bore tubing
- Individually calibrated on automatic calibration machine for precision and high accuracy
- Strict quality control through all steps eradicate possible deviations
- All measuring cylinders are calibrated to contain (TC, In) and all tolerances are according to IS / ISO / DIN / ASTM class " A " Standards
- Supplied with individual certificate and can be download from the BOROSIL website
- Specially designed hexagonal base provides sturdiness to the cylinder
- Perfect spout designed assures pouring without any drips
- Graduations and Inscriptions are printed in amber / white enamel
- Cylinders are also available with penny head stopper





2975 - NESSLER CYLINDERS

- Complies with IS 4161
- Facilitates colour comparison of water samples
- Manufactured from precision bore 3.3 borosilicate tubing selected for freedom from colour or visible defects
- White enamel inscriptions

Product Code	Capacity ml	Approx O.D. x Height mm	Quantity Per Case
2975012	50	25 x 150	20
2975016	100	34 x 180	30

100 ml Cylinder is marked at 50 ml and 100 ml

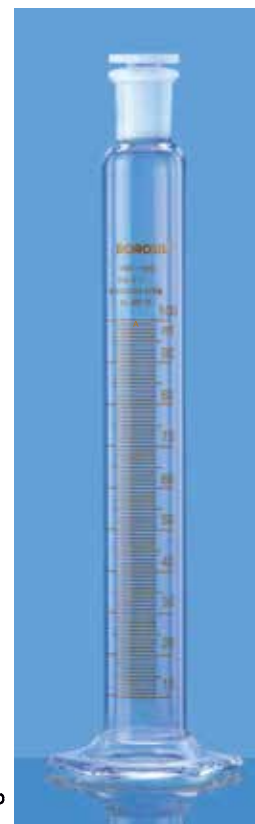
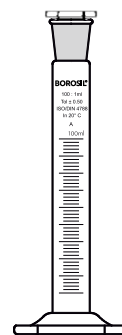
50 ml Cylinders is marked at 50 ml

2981 - CYLINDERS

Graduated, Single Metric Scale, with Penny Head
Interchangeable Stopper with Hexagonal Base, Class A,
with Certificate

- Complies with IS 878, EN ISO 4788
- Each cylinder is engraved with a unique serial number, and comes with a Certificate of Calibration traceable to national standards
- Graduations in Amber enamel
- Sturdy hexagonal base prevents roll-over and ensures greater stability
- Solid glass stopper

Product Code		Capacity ml	Graduation Interval ml	Tolerance ± ml	Stopper Size	Quantity Per Case
Batch Certified	Individually Certified					
2981005A	2981005D	5	0.1	0.05	10 / 19	5
2981006A	2981006D	10	0.2	0.10	10 / 19	5
2981009A	2981009D	25	0.5	0.25	14 / 23	10
2981012A	2981012D	50	1.0	0.50	14 / 23	10
2981016A	2981016D	100	1.0	0.50	19 / 26	10
2981021A	2981021D	250	2.0	1.00	24 / 29	5
2981024A	2981024D	500	5.0	2.50	24 / 29	5
2981029A	2981029D	1000	10.0	5.00	34 / 35	4
2981030A	2981030D	2000	20.0	10.0	34 / 35	4

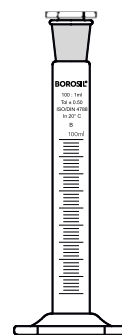


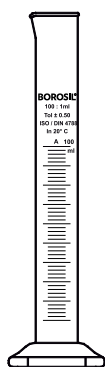
2982 - CYLINDERS

Graduated, Single Metric Scale, with Penny Head
Interchangeable Stopper with Hexagonal base, Class B

- Complies with IS 878, EN ISO 4788
- Graduations in Amber enamel
- Sturdy hexagonal base prevents roll-over and ensures greater stability
- Solid glass stopper

Product Code	Capacity ml	Graduation Interval ml	Tolerance ± ml	Stopper Size	Quantity Per Case
2982005D	5	0.1	0.1	10 / 19	5
2982006D	10	0.2	0.2	10 / 19	5
2982009D	25	0.5	0.5	14 / 23	10
2982012D	50	1.0	1.0	14 / 23	10
2982016D	100	1.0	1.0	19 / 26	10
2982021D	250	2.0	2.0	24 / 29	10
2982024D	500	5.0	5.0	24 / 29	5
2982029D	1000	10.0	10.0	34 / 35	4
2982030D	2000	20.0	20.0	34 / 35	4





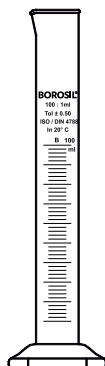
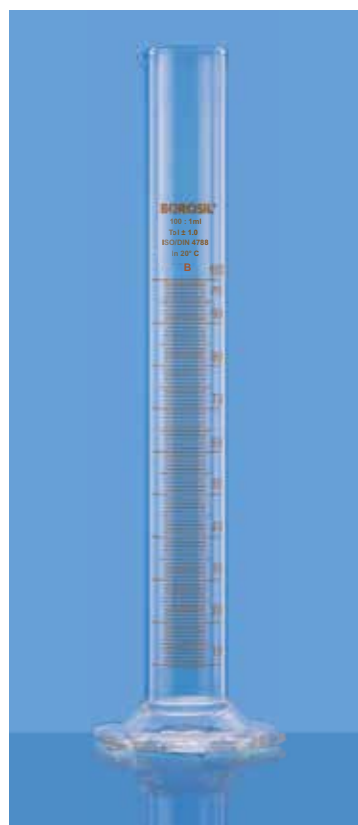
3021-CYLINDERS

Graduated, Single Metric Scale, with Pour Out, with Hexagonal Base, Class A, with Certificate

- Complies with IS 878, EN ISO 4788
- Each cylinder is engraved with a unique serial number, and comes with a Certificate of Calibration traceable to national standards
- Graduations in Amber enamel
- Sturdy hexagonal base prevents roll-over and ensures greater stability

Product Code		Capacity ml ml	Graduation Interval	Tolerance ± ml	Quantity Per Case
Batch Certified	Individually Certified				
3021005A	3021005D	5	0.1	0.05	5
3021006A	3021006D	10	0.2	0.1	5
3021008A	3021008D	20*	1.0	0.25	10
3021009A	3021009D	25	0.5	0.25	10
3021012A	3021012D	50	1.0	0.5	10
3021016A	3021016D	100	1.0	0.5	10
3021018A	3021018D	150*	2.0	1.0	5
3021021A	3021021D	250	2.0	1.0	10
3021024A	3021024D	500	5.0	2.5	5
3021029A	3021029D	1000	10.0	5.0	4
3021030A	3021030D	2000	20.0	10.0	4

*20 & 150 ml Not covered in any standards.



3022 - CYLINDERS

Graduated, Single Metric Scale, with Pour out, with Hexagonal Base, Class B

- Complies with IS 878, EN ISO 4788
- Graduations in Amber enamel
- Sturdy hexagonal base prevents roll-over and ensures greater stability

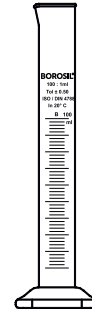
Product Code	Capacity ml	Graduation Interval ml	Tolerance ± ml	Quantity Per Case
3022005D	5	0.1	0.1	5
3022006D	10	0.2	0.2	5
3022009D	25	0.5	0.5	10
3022012D	50	1.0	1.0	20
3022016D	100	1.0	1.0	20
3022018D	150*	2.0	2.0	5
3022021D	250	2.0	2.0	10
3022024D	500	5.0	5.0	5
3022029D	1000	10.0	10.0	4
3022030D	2000	20.0	20.0	4

*150 Not covered in any standards.

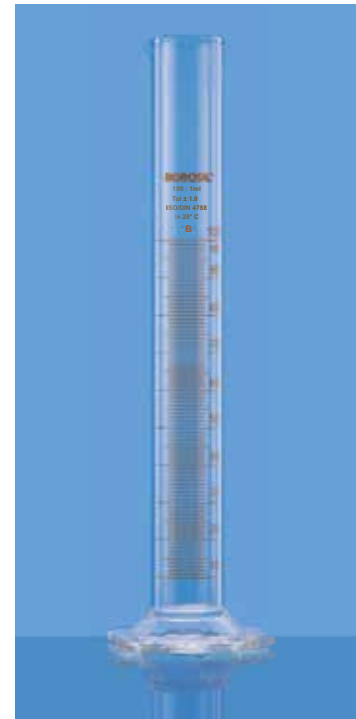
2011 - CYLINDERS

Graduated, Single Metric Scale, with Pour Out, with Hexagonal Base, Class A, with Certificate, ISO 4788, NABL Certified

- Complies with IS 1997, EN ISO 4788



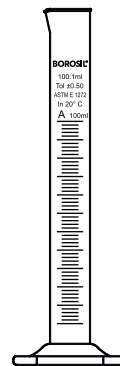
Product Code	Capacity ml	Graduation Interval	Tolerance ± ml	Quantity Per Case
2011005	5	0.1	0.05	1
2011006	10	0.2	0.1	1
2011009	25	0.5	0.25	1
2011012	50	1.0	0.5	1
2011016	100	1.0	0.5	1
2011018	150*	2.0	1.0	1
2011021	250	2.0	1.0	1
2011024	500	5.0	2.5	1
2011029	1000	10.0	5.0	1
2011030	2000	20.0	10.0	1



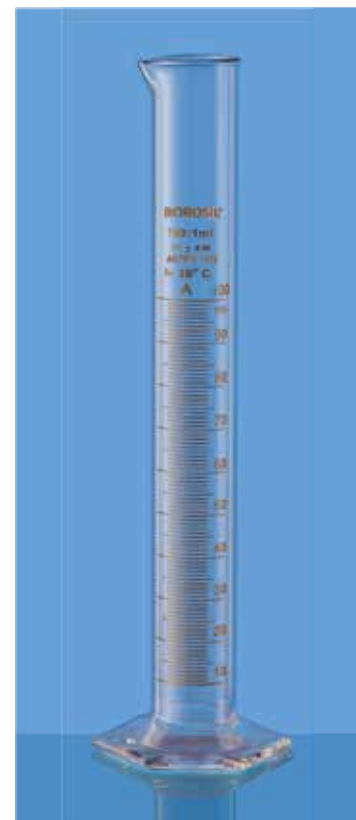
3026 - CYLINDERS, ASTM

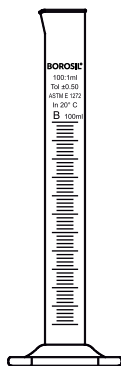
Graduated, Single Metric Scale, with Pour Out, with Hexagonal Base, Accuracy as per ASTM, Class A with Certificate (USP)

- Complies with ASTM E 1272
- Calibrated as per Class A tolerances required by the United States Pharmacopoeia (USP) that are tighter than those of ISO / DIN standards
- Each cylinder is engraved with a unique serial number, and comes with a Certificate of Calibration traceable to national standards
- Graduations in Amber enamel
- Manufactured with chemically resistant 3.3 borosilicate glass
- Sturdy hexagonal base prevents roll-over and ensures greater stability



Product Code		Capacity ml	Graduation Interval ml	Tolerance ± ml	Quantity Per Case
Batch Certified	Individually Certified				
3026005A	3026005	5	0.1	0.05	5
3026006A	3026006	10	0.2	0.1	5
3026009A	3026009	25	0.5	0.17	5
3026012A	3026012	50	1	0.25	5
3026016A	3026016	100	1	0.5	5
3026021A	3026021	250	2	1	5
3026024A	3026024	500	5	2	4
3026029A	3026029	1000	10	3	4
3026030A	3026030	2000	20	6	4



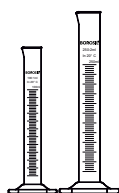


3027 - CYLINDERS ASTM

Graduated, Single Metric Scale With Pour Out with Hexagonal Base, Accuracy as per ASTM, Class B (USP)

- Complies with ASTM E 1272
- Calibrated as per Class B tolerances required by the United States Pharmacopoeia (USP) that are tighter than those of ISO / DIN standards
- Graduations in Amber enamel
- Manufactured with chemically resistant 3.3 borosilicate glass
- Sturdy hexagonal base prevents roll-over and ensures greater stability

Product Code	Capacity ml	Graduation Interval ml	Tolerance \pm ml	Quantity Per Case
3027005	5	0.1	0.10	5
3027006	10	0.2	0.20	5
3027009	25	0.5	0.34	10
3027012	50	1	0.50	10
3027016	100	1	1.00	10
3027021	250	2	2.00	10
3027024	500	5	4.00	5
3027029	1000	10	6.00	4
3027030	2000	20	12.00	4

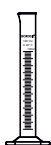


3032 - TAPPED DENSITY CYLINDER

As Per USP, Ch. 616

- Used in tapped density apparatus to measure bulk density of powders

Product Code	Capacity ml	Quantity Per Case Set
3032041	100 & 250	1 Each



3033 - TAPPED DENSITY CYLINDER

As Per USP, Ch. 616

Product Code	Capacity ml	Quantity Per Case
3033016	100	2



3034 - TAPPED DENSITY CYLINDER

As Per USP, Ch. 616

Product Code	Capacity ml	Quantity Per Case
3034021	250	2

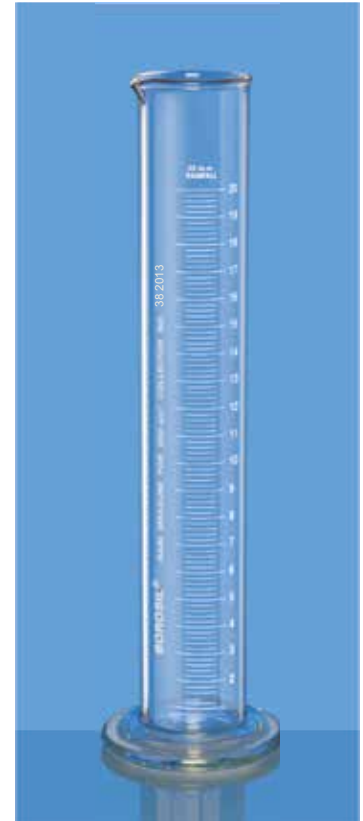
3070 - CYLINDERS

Rain Measure, Metric Scale, Graduated, With Round Base

- Complies with IS 4849
- Manufactures with chemically resistance 3.3 borosilicate glass
- Graduation in white enamel
- The cylinders are graduated to indicate rainfall in mm when used with appropriate rain collector



Product Code	Size mm	Used For Collector Area cm ²	Graduation Interval mm	Tolerance ± mm	Quantity Per Case
3070096	20	200	0.2	0.05	5
3070098	20	100	0.2	0.10	10



Desiccators

BOROSIL[®] brand Desiccators are equipped with bodies and covers that have great strength and utility. The body is designed with a streamlined contour that facilitates easy cleaning of the used desiccant. Any desiccant such as sulphuric acid, phosphoric pentoxide, calcium chloride or silica gel may be used in Borosil brand Desiccators. For your convenience, all Borosil brand Plain Desiccators of the same size have interchangeable covers and bodies. When the ground surface is cleaned and greased, Vacuum type Desiccators hold a vacuum of 500 mm of mercury.



3082 - DESICCATORS

with Cover and Porcelain Plate, Plastic Knob

- Complies with IS 6128
- Robust Desiccator base and cover made of borosilicate glass
- Simple design for drying under atmospheric pressure
- Ground glass flanges
- Plates are positioned on an internal ledge within the base
- Generally used for drying of moist products, and for storage of moisture-sensitive substances



Desiccators

Product Code	Approx ID Ground Flange mm	Quantity Per Case
3082041	100	1
3082042	150	1
3082043	200	1
3082044	250	1
3082045	300	1

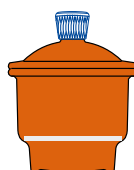
3083 - VACUUM DESICCATORS

Vacuum, Stopcock with PTFE Spindle, and Porcelain Plate

- Complies with IS 6128
- Designed for use under vacuum
- Sturdy construction of borosilicate glass
- Ground glass flanges
- Plates are positioned on an internal ledge within the base
- Comes with glass stopcock at the top
- Generally used for drying of moist products, and for storage of moisture sensitive substances



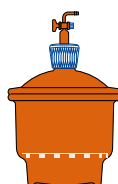
Product Code	Approx ID Ground Flange mm	Quantity Per Case
3083041	100	1
3083042	150	1
3083043	200	1
3083044	250	1
3083045	300	1



3084 - DESICCATORS with Cover and Porcelain Plate, Plastic Knob, Amber

- Complies with IS 6128
- Robust Desiccator base and cover made of borosilicate glass
- Simple design for drying under atmospheric pressure
- Ground glass flanges
- Plates are positioned on an internal ledge within the base
- Generally used for drying of moist products, and for storage of moisture-sensitive & light sensitive substances

Product Code	Approx ID Ground Flange mm	Quantity Per Case
3084041	100	1
3084042	150	1
3084043	200	1
3084044	250	1
3084045	300	1



3085 - VACUUM DESICCATORS Vacuum, stopcock with PTFE spindle and Porcelain plate, Amber

- Complies with IS 6128
- Designed for use under vacuum
- Sturdy construction of borosilicate glass
- Ground glass flanges
- Plates are positioned on an internal ledge within the base
- Comes with glass stopcock at the top
- Generally used for drying of moist products, and for storage of moisture sensitive & light sensitive substances

Product Code	Approx ID Ground Flange mm	Quantity Per Case
3085041	100	1
3085042	150	1
3085043	200	1
3085044	250	1
3085045	300	1

BOROSIL®

Steps for
Assembling

Vacuum Desiccator

STEP 1 :

Remove the different parts
supplied with the Desiccator

- Bottom
- Lid
- Porcelain plate
- Stop cock



STEP 2 :

Place the porcelain plate
in the bottom part of
the desiccator



STEP 3 :

Place the lid over it



STEP 4 :

Remove the blue knob
from the lid and fit
the stopcock in blue knob



STEP 5 :

Screw the blue knob
along with the stopcock
on the lid
Connect the desiccator
to a vacuum source (pressure
1 bar) with a rubber tube.



Proudly Made in India Since 1962

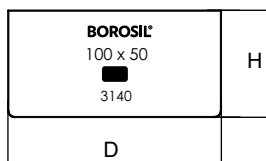
Dishes



3140 - DISHES

Crystallizing

- Reinforced and fire-polished rims reduce chipping
- Large labelling field for easy marking
- Very high chemical resistance
- High resistance to thermal shocks



Product Code	Approx O.D. x Height mm	Approx Capacity ml	Quantity Per Case
3140077	100 x 50	330	10
3140081	150 x 75	1150	10
3140086	190 x 100	2500	4

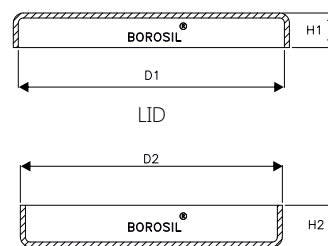
3160 - DISHES

Culture, Petri

- Complies with IS 2626
- These Dishes are clear and withstand repeated sterilisation (wet or dry)
- Made of 3.3 borosilicate glass using a special manufacturing process
- Beaded edges impart greater mechanical strength
- Ideal for use in routine work
- Specially formed to ensure even wall thickness and consistent optical performance

Product Code	Size mm	LID Approx I.D. (D1) x Height (H1) mm	Bottom Approx O.D. (D2) x Height (H2) mm	Quantity Per Case
3160065	50 x 17	53 x 15	50 x 17	100
3160072	80 x 17	83 x 15	80 x 17	100
3160077	100 x 17 [#]	103 x 15	100 x 17 [#]	100
3160081	150 x 20	153 x 17	150 x 20	40
3160087	200 x 20	203 x 20	200 x 20	10

Not covered in standard



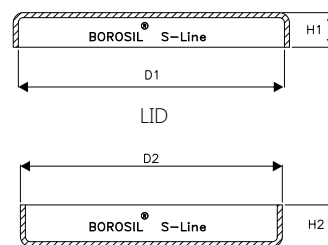
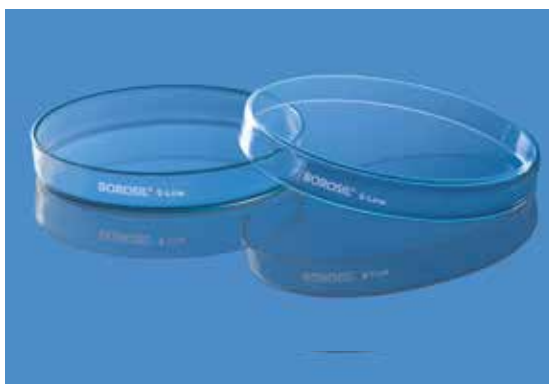
BOTTOM

3165 - DISHES

Culture Petri, Borosil S-Line

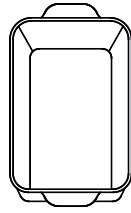
- The inner surface of these Dishes have a very good flatness
- The accuracy of many biological assays depends on the flatness of the inside base of the Petri dish
- Made of soda lime glass ensuring that the inner surface of the top and base are absolutely flat
- These Dishes have high clarity and are free of bubbles
- Ideal for use in routine work

Product Code	Size mm	LID Approx I.D. (D1) x Height (H1) mm	Bottom Approx O.D. (D2) x Height (H2) mm	Quantity Per Case
3165065	50 x 12	46 x 8	44 x 12	100
3165072	80 x 15	76 x 12	74 x 15	100
3165A75	90 x 17	86 x 12	84 x 15	100
3165077	100 x 15	96 x 12	94 x 15	100
3165A77	100 x 20	96 x 15	94 x 20	100
3165081	150 x 25	143 x 18	141 x 25	40
3165087	200 x 30	195 x 24	192 x 30	10



BOTTOM

• Dishes
• Distilling Apparatus
• Water Distilling Unit
• Apparatus

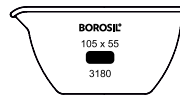


3170 - TRAYS

Drying, Heavy Wall

- The trays withstand hot air or steam sterilization
- Facilitates paper chromatography
- Dimensions are approximate, representing the inside length x width x height in mm

Product Code	Approx Dimension mm	Approx Capacity ml	Quantity Per Case
3170044	320 x 180 x 51	1500	5
new 3170A44	258 x 165 x 43	1500	5
3170043	350 x 200 x 58	2400	5
new 3170A43	304 x 190 x 44	2000	5
3170042	386 x 217 x 63	3000	5
new 3170A42	328 x 203 x 56	3000	5
3170041	404 x 257 x 61	3500	5



3180 - Dishes

Evaporating, Flat Bottom, With Pour Out

- Made of 3.3 borosilicate glass
- As per DIN 12336 standards
- Very high chemical resistance
- High resistance to thermal shocks
- Designed with a spout to facilitate clean pouring
- Withstand to repeated sterilisation (Wet or dry)
- Beaded edge give greater mechanical strength
- Ideal for use in routine work

Product Code	Approx O.D. x Height mm	Approx Capacity ml	Quantity Per Case
3180006	40 x 18	10	10
3180007	50 x 25	15	10
3180A11	60 x 30	45	10
3180013	70 x 35	60	10
3180A18	95 x 55	170	10
3180A22	11 x 65	320	10
3180025	140 x 80	600	10
3180044	190 x 100	1500	10
3180A30	230 x 130	2500	10
3180078	105 x 55	290	10
3180081	150 x 80	855	10
3180087	200 x 100	1790	8

BOROSIL®

S LINE PETRI DISHES

Culture vessel for

- Microbial applications
- Plant tissue culture applications

NOW Lid and Bottom identification is EASY!!!



Proudly Made in India Since 1962

Distilling Apparatus

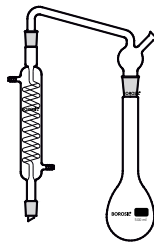
Most of the distillation equipment required in an average laboratory can be constructed using standard Borosil components. Distillation assemblies for specific applications are available as complete units, as listed herein.



3340-DISTILLING APPARATUS

Ammonia, With Graham Condenser, Interchangeable Joints

- Ideal for determining nitrogen in organic compounds
- Digestion and distillation stages can be performed in this apparatus
- The inlet tube allows permanganate solution to be introduced after distillation



Product Code	Capacity ml	Quantity Per Case
3340024	500	2 Set

Spares are available on request

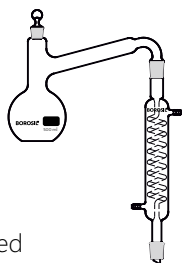


Distilling Apparatus

3360-DISTILLING APPARATUS

With Graham Condenser, Interchangeable Joints, Interchangeable Stopper

- Ideal for batch production of high purity distilled water
- General purpose Batch Distillation Assembly equipped with an interchangeable stoppered neck that facilitates addition
- The Flask has a flat base with a delivery tube on the side



Product Code	Capacity ml	Condenser Jacket mm	Inter-changeable Joint	Quantity Per Case
3360024	500	200	19 /26	2 Set

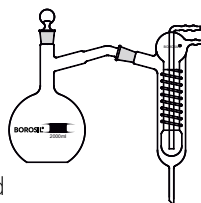
Spares are available on request



3380- DISTILLING APPARATUS

with Friedrichs Condenser, Interchangeable Joint and Stopper

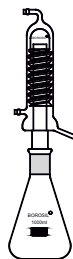
- Ideal for batch production of high purity distilled water
- General purpose Batch Distillation Assembly equipped with an interchangeable stoppered neck that facilitates addition
- The Flask has a flat base with a delivery tube on the side
- Comes with Friedrich's Spiral Condenser for higher distillation rates



Product Code	Capacity ml	Interchangeable Joint	Quantity Per Case
3380030	2000	24 / 29	1 Set

Spares are available on request





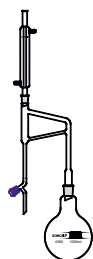
3440-DISTILLING APPARATUS

Compact with Friedrichs Condenser, Interchangeable Joint

- A compact distillation assembly with specially designed Friedrich's Condensers
- This Condenser is designed with vapour tubing rising at the top
- A 1000 ml Erlenmeyer Flask is provided with an interchangeable 34/35 joint

Product Code	Capacity ml	Interchangeable Joint	Quantity Per Case
3440029	1000	34 / 35	2 Set

Spares are available on request



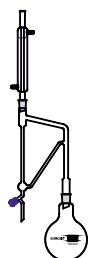
3450-ESSENTIAL OIL DETERMINATION APPARATUS

(Clevenger Apparatus), as per IS 1797, for Oil Heavier Than Water

- This apparatus is ideal for estimation of volatile oil that is heavier than water
- Comes with a 5 ml Receiver with stopcock, an Oil Separator Tube, a condenser and 1000 ml flask

Product Code	Capacity ml	Quantity Per Case
3450029	1000	1 Set
3450030	2000	1 Set
3450033	5000	1 Set
3450038	10000	1 Set
3450040	20000	1 Set

Spares are available on request



3451-ESSENTIAL OIL DETERMINATION APPARATUS

(Clevenger Apparatus, for Oil Lighter Than Water)

- Ideal for estimation of volatile oil that is lighter than water
- Comes with a 5 ml Receiver with stopcock, an Oil Separator Tube, a condenser and 1000 ml flask

Product Code	Capacity ml	Quantity Per Case
3451029	1000	1 Set
3451030	2000	1 Set
3451033	5000	1 Set
3451038	10000	1 Set
3451040	20000	1 Set

Spares are available on request

3452 - ALCOHOL DISTILLATION UNIT

- Ideal for distilling alcohol in the laboratory to produce the purest grade
- Thorpe's revenue still for purification of ethyl alcohol popularly used in pharmaceutical industries



Product Code	Capacity ml	Quantity Per Case
3452029	1000	1 Set

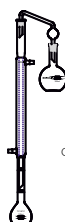
Spares are available on request



Distilling Apparatus

3454 - R M VALUE APPARATUS

- Ideal for use in dairy industries
- Facilitates the determination of butter fat, and the analysis of oil, fat and waxes



Cat No. 3454A22

Product Code	Capacity ml	Quantity Per Case
3454022	300	1
3454A22*	300	1

* As per IS 548 Part I Standard

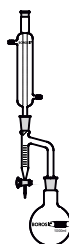
Spares are available on request



3602-DISTILLING APPARATUS

Dean And Stark, Moisture Test,
(as per IP Specifications)

- Made of 3.3 borosilicate glass
- Uniform wall distribution of the Flask makes it suitable for heating
- Consists of a graduated 10 ml Receiver with 0.1 intervals



Product Code	Capacity of Receiver ml	Quantity Per Case
new 3602005	5	1 set
3602006	10	2 Set

Spares are available on request

Consists of receiver 10 ml graduated with 19 / 26 outer joint and 24 / 29 inner joint, round bottom flask 1000 ml with 24 / 29 outer joint and Liebig condenser 200 mm with 19 / 26 joint. The 10 ml receiver is graduated from 1 ml to 10 ml in 0.1 ml intervals.



Laboratory Water Distillation System

Eco Water Stills

Distillation removes organics, inorganic impurities, as well as colloidal solids from water.

Borosil glass distillation units continue to be the most effective and economical method of producing pure water for laboratory use.

By contrast, de-ionisers are effective only in removing those substances that are ionised. Moreover, the resins contribute organic impurities to water, resulting in an environment conducive to bacterial growth in course of time.

Borosil distillation units are designed to produce a distillate of consistent purity. The unit consists of horizontal borosilicate boilers, condensers and a quartz heater. All the parts are replaceable.

Advantages

- Compact and easy to use
- Economical and ideal for educational and general laboratory use
- Powder-coated stand for rust-free operation
- Provision for easy cleaning of the boiler



Eco MS : All glass single distillation system

- ◆ Single distilled
- ◆ With acid addition funnel & drain stopcock
- ◆ Unique condenser design for maximum output
- ◆ Safety thermostat to prevent over heating in the event of water supply failure



Model	Eco MS
Output per hour	4 Lit / Hr
Typical pH	5.0 - 6.5
Conductivity, μScm^{-1}	3.0 - 4.0
Resistivity, mOhm-cm	0.25 - 0.30
Output Temperature	25 - 35°C
Pyrogen Content*	Pyrogen free
Water supply	1 lit / minute, 3 - 100 psi, (20 - 700kPa)
Electricity supply	220 - 240v, 50 - 60 Hz, Single phase
Power requirement	3 kw
Dimensions (W x D x H)	500 x 150 x 450 mm
Product Code	100336104LG00M

Smart All quartz double distillation system

- ◆ Compact design
- ◆ Fully automatic operation
- ◆ Microprocessor controller with numeric display
- ◆ In-built trouble shooting analyser
- ◆ Electronic grade-I quartz raw material
- ◆ Built-in timer function
- ◆ Built-in boiler overheat protection
- ◆ Built-in condenser water flow monitoring system
- ◆ Built-in automatic shut off of cooling water, when power fails to saver water.
- ◆ Built-in reservoir controller
- ◆ Audio cum display of failure indication



Model	Smart All Quartz Double Still
Output per hour	2 Lit / Hr
Typical pH	6.9 - 7.0
Conductivity, μScm^{-1}	0.1 - 0.5
Output Temperature	30 - 40°C
Pyrogen Content*	Pyrogen free
Water supply	2 Lit / minute, 3 - 100 psi, (20 - 700 k Pa)
Electricity supply	220 - 240v, 50 - 60 Hz, Single phase
Power requirement	3 kw
Yeast & Mould	Nil
Total Plate Count	Nil
Standard Plate count	Nil
Organic Matter	Nil
KMnO ₄ Colour retention	60 Minutes
UV absorbance at 254 mm	0.0007
Product Code	100336502LQ00S

Cabinet All : glass single or double distillation unit

- ◆ Fully automatic
- ◆ Reservoir level sensor for automatic operation
- ◆ Low temperature distillate
- ◆ Flow switch for boiler safety
- ◆ Manufactured with High quality 3.3 Borosilicate glass
- ◆ Single and double distillation
- ◆ High quality pyrogen free output
- ◆ Easy to clean



Model	Single Distillation	Double Distillation
Output per hour	4 Lit / Hr	4 Lit / Hr
Boiler	3.3 Borosilicate Glass	3.3 Borosilicate Glass
Condenser	3.3 Borosilicate Glass	3.3 Borosilicate Glass
Typical pH	5.0 - 6.0	6.0 - 7.0
Conductivity, μScm^{-1}	1.0 - 2.0	0.8 - 1.0
Output Temperature	30 - 40°C	30 - 40°C
Pyrogen Content*	Pyrogen free	Pyrogen free
Water supply	2 Lit / minute, 3-100 psi, (20-700 kPa)	2 Lit / minute, 3-100 psi, (20-700 kPa)
Electricity supply	220 - 240v, 50 -60 Hz, double phase	220 - 240v, 50 -60 Hz, double phase
Power requirement	3 kw	6 kw
Product Code	100337004LG00C	100337204LG00C

3369 - Silicone tubing for distillation unit & laboratory application



*Heat Resistance Temperature Range: -40°C To +205°C

The technical data given by Borosil must be used as a guide only. Borosil does not guarantee the accuracy of information and is not responsible for its end use.

Silicone tubing is used for laboratory and industrial applications only. It should not be used for implants, human reproductive system and other medical applications.

336900 - 8mm x 12mm is used for 3361-1.5, 3362-1.5, 3363-2.5 series

3369004 - 10mm x 14mm is used for 3361-4l, 3362-4l, 3364-2.5l, 5l, 3365-1.5l, 2.5l, 5l, 3363-5l, 10l.

Product Code	For Cat No.	Size	Quantity per case in mtr
3369001	3369	4mm ID x 7mm OD	10
3369002	3369	6 mm ID x 9 mm OD	10
3369003	3369	8 mm ID x 12 mm OD	10
3369004	3369	10 mm ID x 14 mm OD	10



SOIL



FOOD



WATER

Experts in Kjeldahl Nitrogen Setimation



Block or IR Digesters
for fast, safe
and complete
digestion of
samples



High efficiency
Fume Scrubbers
for a lab free of
toxic fumes



Easy to operate
**Kjeldahl Distillation
Systems**
with unmatched
safety &
reproducibility

Proudly Made in India

COD Digestion Unit

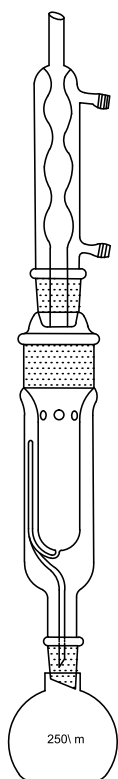


The COD Digestion Unit is used for determination of Chemical Oxygen Demand in effluents. The unit consists of:

- 1) Aluminium block heating unit with provision to keep 8 or 15 samples at a time in 40 mm diameter reaction vessels.
- 2) Air Condensers
- 3) Digital PID temperature indicator cum controller with built in timer for temperatures up to 250 °C
- 4) Insert rack to hold the digestion tube with Air Condenser.

Product	Description	HSN Code
100COD000008	8 Test COD Digestion Apparatus	84194090
100COD000015	15 Test COD Digestion Apparatus	84194090
100CODSGT250	COD digestion tubes 250 ml, 5pc / pack	70179090
100CODSAC000	COD Air Condenser, 5pc / pack	70179090

Soxhlet Hot Extraction

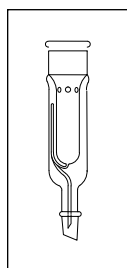


The new jacketed design protects the siphon from breakage and permits the extraction at the boiling point of the solvent. During extraction process the inner cup is enveloped in ascending solvent vapors.

The hot extraction process reduces time considerably. Compared with condensed solvent in the classical soxhlet method where the solvent temperature is below the boiling point, this method is faster because analytes are more soluble in hot vapor than in cold to warm solvent.

It not only reduces time of extraction, but also reduces power and is very easy in handling

Product	Description	HSN Code
100JHE000000	Jacketed Hot Extraction Unit with 250ml flat bottom flask	70179090
100JHESGE100	Spare Extractor 100ml	70179090



Extractor 100ml

new

SOXHLET EXTRACTION :

Borosil® Extraction apparatus for the quantitative determination of the fat content by Soxhlet method are available to accommodate extraction of one, four or six samples.

The fat determination is applicable to a wide variety of foods:

- 1) **Meat and poultry products**
- 2) **Cereals and feed**
- 3) **Confectionery, milk and dairy products**

Features:

- Each sample position is individually adjustable with individual energy regulator.
- Effective coil condenser with both inlet and outlet at top for easy handling.
- Practical stand for holding condensers securely between extractions.
- Mounts for safely holding glass parts after removal of the flask.
- Supplied with silicone tubing, glass parts and compact stand.
- Efficient **heating block** with aluminium cup ensures uniform heating.
- Aluminium cup can be filled with water to make the instrument act like a water bath. It is a safety measure.

Fat Determination Apparatus



Fat Determination Apparatus

Ordering Information

Product Code	Extractor Capacity ml	Position	Flask Capacity ml	Extractor Capacity ml	Dimension W x D x H mm	Weight kgs	Power kw
100SFE00012116	1-100	1	250	100	220 X 300 X 730	7	0.5
100SFE00042116	4-100	4	250	100	660 x 300 x 730	12	2
100SFE00062116	6-100	6	250	100	1000 x 300 x 800	15	3
100SFE00012420	1-200	1	500	200	220 x 300 x 730	7	0.5
100SFE00042420	4-200	4	500	200	660 x 300 x 730	12	2
100SFE00062420	6-200	6	500	200	1000 x 300 x 800	15	3

For products listed on the above table use HSN code 84194090

ACCESSORIES PARTS FOR SOXHLET APPARATUS

Product Code	Description
100SFE1GF02100	Flask: 250 ml*
100SFE1GE00016	Extractor: 100 ml*
100SFE1GC00016	Condenser for 100ml Extractor*
100SFE1ST00000	Silicone tubing: 8 X 12 - 10 meters
100SFE1HB10016	Heating block for FAT 1 - 100
100SFE1HB40016	Heating block for FAT 4 - 100
100SFE1HB60016	Heating block for FAT 6 - 100
100SFE1GF10020	Flask: 500 ml* - 1 pc
100SFE1GE40020	Extractor: 200 ml*
100SFE1GC60020	Condenser for 200ml Extractor*
100SFE1HB10020	Heating block for FAT 1 - 200
100SFE1HB40020	Heating block for FAT 4 - 200
100SFE1HB60020	Heating block for FAT 6 - 200

For products listed on the above table use * HSN code 70179090 and the other products HSN code 84194090

Extractors

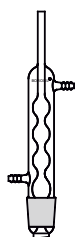
Liquid Solid Extraction involves the elution of a solid sample with pure solvent vapour. The sample is held in the Extractor body either directly or in a thimble. The siphoning type of Soxhlet Extractor finds the widest application in laboratory work. Borosil Soxhlet Extraction Apparatus is available in six sizes. The component parts of the apparatus are provided with interchangeable joints for greater flexibility.



3740 - EXTRACTORS Soxhlet, Interchangeable Joint

- Complies with IS 10640
- As per DIN 12602
- Made of borosilicate glass
- Designed with a bulb in the siphon tube near the top, to aid the siphoning action
- The vapour tube also protects the siphon tube from accidental damage

Product Code	Capacity ml	Interchangeable Joints		Quantity Per Case
		Socket	Cone	
3740013	60	34 / 35	24 / 29	5
3740016	100	40 / 38	24 / 29	5
3740020	200	50 / 42	24 / 29	5



3741 - CONDENSERS, ALLIHN For Soxhlet Extraction Apparatus

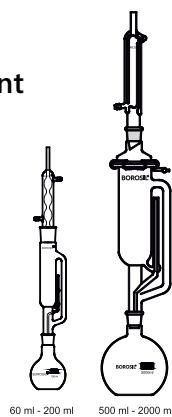
- Made of borosilicate glass
- Greater surface area than the Liebig Condenser owing to a series of bulbs, resulting in higher cooling capacity
- Ideal for laboratory scale refluxing

Product Code	Capacity ml	Interchangeable Joints	Quantity Per Case
		Cone	
3741013	Small	34 / 35	5
3741016	Medium	40 / 38	5
3741020	Large	50 / 42	5

3840 - EXTRACTION APPARATUS

Soxhlet Complete With Allihn Condenser Interchangeable Joint

- Complies with IS 10640
- As per DIN 12602
- Used for separation of the extract from the liquid or solid
- Greater surface area than the Liebig Condenser owing to a series of bulbs, resulting in higher cooling capacity
- This method enables effective separation, with relatively small quantities of solvent
- Ideal for laboratory scale refluxing



Product Code	Capacity ml	Flask Size ml	Quantity Per Case
3840013	60	150	1
3840016	100	250	1
3840020	200	500	1
3840024	500*	2000	1
3840029	1000*	3000	1
3840030	2000*	5000	1

Spares are available on request

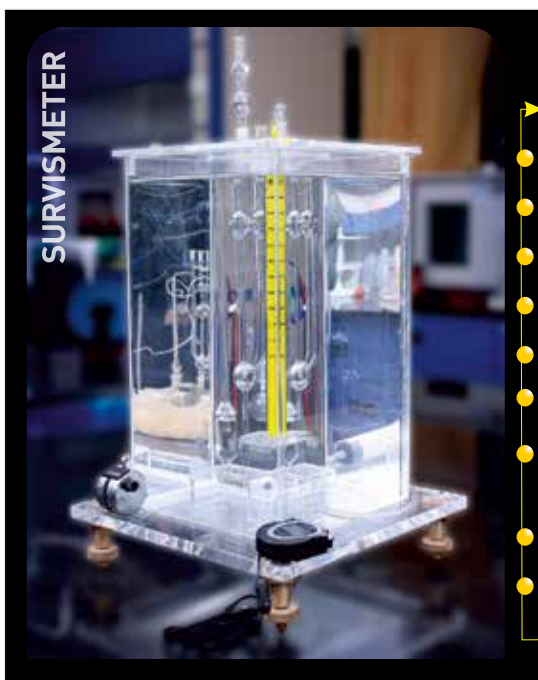
For flask refer Cat No. 4100

* Extractor Supplied are with double surface condenser for higher cooling capacity & flange type soxhlet extractors



Mansingh Survismeter

(Singapore Govt. Patent No. 126089)



Features

- **Multi data device**
- **Vibration free transparent casing**
- **Easy handling**
- **Easy sampling**
- **Easy data process**
- **No air contamination because the sample is jacketed within respective bulbs**
- **Boon for physicochemical characterization of volatile, inflammables, carcinogenic liquids**
- **Eco-friendly**
- **Homogeneous Temperature control**

Cat. No.	Description	Quantity Per Case
3453	Borosil Mansingh Survismeter For Measurement of surface Tension and Viscosity	1 Set

For centuries, surface tension (γ) and viscosity (η) data have been measured using separate instruments, resulting in wastage of time and materials. Made of Borosil Glass material, Borosil Mansingh Survismeter has been designed to measure surface tension, interfacial tension, wetting coefficient, viscosity and friccohesity data to rationalise frictional and cohesive forces, respectively. Friccohesity focuses on a complete friccochemistry of giants and supramolecular mixtures. Borosil Mansingh Survismeter is a state-of-the-art apparatus for measurement of surface tension (± 0.01 mN/m), interfacial tension

(± 0.01 mN/m), viscosity ($\pm 10^{-4}$ mPa.S), wetting coefficient (± 0.01 mPa.cm²) friccohesity ($\pm 10^{-6}$ s/cm) and related physicochemical parameters generated from intramolecular electrostatical shifts.

Borosil Mansingh Survismeter, being a green science TSAD (Trusted Sustainable Analytical Device), measures the above mentioned PCI (PhysicoChemical Indicators), while simultaneously saving 98% of experimental resources, infrastructure and skilled manpower, for interacting and reacting molecular materials.

A breakthrough in laboratory instruments, Borosil Mansingh Survismeter has wider analytical potential for quality control and formulations in material applied sciences. It has unique essential facilities and cutting edge features based on 'On & Off' or '0 & 1' circuitry functional loops.

Fundamentally, Borosil Mansingh Survismeter measures surface tension, interfacial tension, wetting coefficient, viscosity and friccohesity simultaneously of aqueous, non-aqueous, aprotic dipolar, polar, protic polar and non-polar solvents and mixtures within wider ranges.

- The absolute and relative parameters are measured with 95.5% CV (Confidence Variance).
- It works on the theory of R4M4 [Reduce Reuse Recycle Redesign - Multipurpose Multidimensional Multifaceted Multitracking of materials and methods with highly précised and accurate experimental results, along with 100% inhibition of polluting discharges in experimental determinations.

For products listed on this page use HSN code 90278090

- The parameters measured with Borosil Mansingh Survismeter are highly significant and reliable for quality analysis of pharmaceuticals, biochemicals, cosmetics, agrochemicals, food and beverages, petroleum and oils, polymer and proteins, sol gels, soaps and detergents, inks, colloids, emulsion technology, pesticides, agrochemicals, insecticides, cutting oils, lubricating, viscous, moderately viscous and highly viscous materials.
- It is especially useful for characterising liquid mixtures of biopolymers, supramolecular chemistry, biotechnological processes and molecular interaction engineering of biomolecular devices, tracking interaction molecular forces, water binding capacities and structural changes during processes.
- It explains the features of Intramolecular Multiple Force Theory (IMMFT) applicable to giant supramolecules, dendrimers and biocomplexes used in several adverse temperature and pressure conditions.
- Borosil Mansingh Survismeter is an asset in case of volatile, moderately and highly volatile liquids and mixtures, volatile organic compounds, flammable liquids and carcinogenic materials as the samples are completely jacketed especially for surface tension, interfacial tension and wetting coefficient determinations.

Merits of Borosil Mansingh Survismeter :

- Fast and multipurpose technology
- Eco-friendly and user-friendly
- Reduces fabrication expenditure
- Reduces the need for glass blowing gases, oxygen gas, LPG and manpower
- Reduces emission of heat into the environment
- Ensures safety during transport and maintenance
- Reduces chemicals and solvents greatly
- Contributes to the promotion of green chemistry
- Innovative for youngsters
- No wastage of the sample
- Requires a smaller sample
- Less time required for analysis
- Requires no basic maintenance
- Non-destructive
- Reduces cleaning reagents
- Reduces the number of operational steps in measurement
- Minimises the infrastructure as compared to individual devices

Industrial Applications

Industries such as cosmetics, soaps and detergents, petroleum and oils, pesticides, beverages, textiles, paints, polymers and textiles, paper pulp, ink and dyes, medicines and drugs, food and mineral water, and coolants and lubricants will directly benefit from the use of Borosil Mansingh Survismeter.

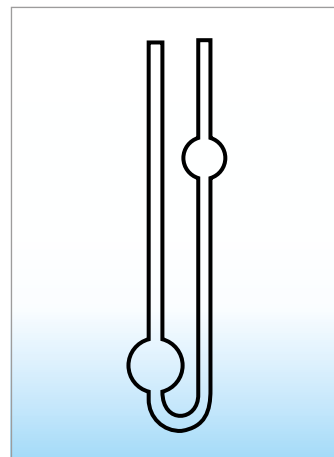
Viscometer

3500-VISCOMETER COLLEGE PATTERN

Oswal 80 -100 Seconds, Uncertified

Product Code	Size	Nominal Constant	Viscosity Range (CS)	Quantity Per Case
3500	O	0.001	0.3 - 3	10

- Supplied without Certificate



Flasks

All laboratories need Flasks of different types. **Borosil** offers a wide range of Flasks for a variety of applications such as boiling, culture, distilling, Erlenmeyer, Filtering, Iodine and Kjeldahl. Choose one to suit your needs.

BOROSIL[®] brand Flasks are designed to deliver the best combination of thermal shock resistance, physical strength and resistance to chemical attack. They are made so as to withstand the demands of the modern laboratory. Flasks with interchangeable joints are particularly suitable for all glass apparatus assemblies.

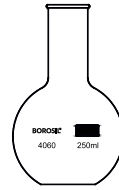
Borosil offers the interchangeable joints most commonly specified for a particular capacity. Tube Adaptors Category Nos. 8800 and 8820 can be used to connect the Flask with a particular size joint to any other apparatus having a different size joint.



4060 - FLASKS

Boiling, Flat Bottom

- Complies with IS 1381 (Part - I), ISO 1773
- Uniform wall thickness distribution makes these Flasks ideal for heating
- All sizes have a durable matt-finished enamelled area for marking



Product Code	Capacity ml	Approx O.D. x Height mm	Approx Neck O.D. mm	Quantity Per Case
4060009	25**	42 x 90	20	50
4060012	50	51 x 90	26	50
4060016	100	64 x 105	26	80
4060018	150**	75 x 132	28	10
4060021	250	85 x 140	34	80
4060022	*300**	88 x 160	24	20
4060024	500	105 x 165	34	40
4060029	1000	131 x 190	42	20
4060030	2000	166 x 230	50	2
4060031	3000	186 x 300	50	4
4060033	5000	224 x 320	58	2
4060034	6000	236 x 340	65	1
4060038	10000	279 x 360	65	1
4060040	20000**	350 x 495	78	1

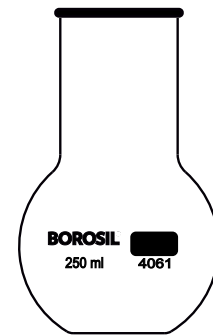
* Suitable for use in Polenske Apparatus

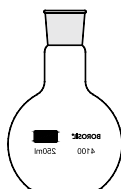
** Not covered in standards

4061 - FLASKS

Flasks, Boiling, Flat Bottom, ISO 24450, Wide Neck

Product Code	Capacity ml	Approx O.D. x Height mm	Approx Neck O.D. mm	Quantity Per Case
4061012D	50	51 x 90	34	50
4061016D	100	64 x 105	34	80
4061021D	250	85 x 140	50	80
4061024D	500	105 x 165	50	40
4061029D	1000	131 x 190	50	20
4061030D	2000	166 x 230	50	2





4100 - FLASKS

Boiling, Flat Bottom, Short Neck, Interchangeable Joint

- Complies with IS 1381 (Part - II), ISO 4797
- Uniform wall thickness distribution makes these Flasks ideal for heating
- All sizes have a durable matt-finished enamelled area for marking
- Equipped with interchangeable joint
- The flat base ensures that the Flask can be placed down even without the supporting ring

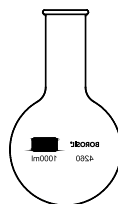
Product Code	Capacity ml	Interchangeable Joint	Approx Height mm	Quantity Per Case
4100018	150	24 / 29	115	5
4100021	250	24 / 29	130	5
4100024	500	24 / 29	160	5
4100029	1000*	34 / 35	288	2
4100030	2000*	34 / 35	321	2
4100031	3000*	34 / 35	345	2
4100033	5000*	34 / 35	381	2

*These are specific flasks with long neck 34/35 joint used in jewellery manufacturers

4260 - FLASKS

Boiling, Round Bottom

- Complies with IS 1381 (Part I), ISO 1773
- Uniform wall thickness distribution makes these Flasks ideal for heating
- All sizes have a durable matt-finished enamelled area for marking



Product Code	Capacity ml	Approx O.D. x Height mm	Approx Neck O.D. mm	Quantity Per Case
4260009	25**	42 x 90	22	50
4260012	50	51 x 95	26	70
4260016	100	64 x 110	26	50
4260018	150**	75 x 137	28	10
4260021	250	85 x 143	34	80
4260024	500**	105 x 168	34	40
4260029	1000	131 x 200	42	20
4260030	2000	166 x 240	51	2
4260031	3000	187 x 305	50	2
4260033	5000**	224 x 350	58	2
4260034	6000	236 x 330	65	1
4260038	10000	279 x 380	65	1
4260040	20000**	350 x 505	78	1

** Not covered in standards

4261 - FLASKS

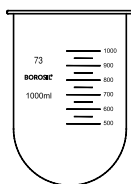
Boiling, Flat Bottom, Wide Neck, ISO 24450

- Uniform wall thickness distribution makes these flasks ideal for heating
- All sizes have a durable matt-finished enamelled area for marking

Product Code	Capacity ml	Approx O.D. x Height mm	Approx Neck O.D. mm	Quantity Per Case
4261012	50	51 x 105	34	70
4261016	100	64 x 110	35	50
4261021	250	85 x 143	51	80
4261024	500	105 x 168	50	40
4261029	1000	131 x 200	50	20
4261030	2000	165 x 240	76	2
4261031	3000**	185 x 260	65	2
4261033	5000**	223 x 310	65	2
4261034	6000	236 x 330	89	1
4261038	10000	279 x 420	89	1
4261040	20000	350 x 520	89	1

** Not covered in standards



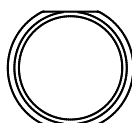
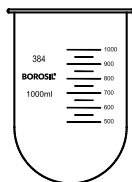


4265-E-FLASKS

Without Side Cut For Dissolution Apparatus as per USP, with Certificate

- Vessels confirms to all requirements of USP Ch. 711
- Smooth hemispherical base with no flaws or defects, straight sides and a flat flange
- Graduated in intervals of 50ml
- Ideal for determining the dissolution characteristics of drugs in capsules and tablets

Product Code	Capacity ml	Approx O.D. x Height mm	Quantity Per Case
4265029	1000	131 x 173	6



4266-L-FLASKS

With Side Cut For Dissolution Apparatus, as per USP with Certificate

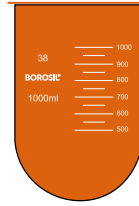
- These vessels conform to all the requirements of USP Ch. 711
- Smooth hemispherical base with no flaws or defects, straight sides and a flat flange
- Two side-cuts at the flange
- Graduated in intervals of 50ml
- Ideal for determining the dissolution characteristics of drugs in capsules and tablets

Product Code	Capacity ml	Approx O.D. x Height mm	Quantity Per Case
4266029	1000	124 x 173	6

4267-E-FLASKS

For Dissolution Apparatus as per USP,
Amber, with Certificate

- These vessels conform to all the requirements of USP Ch. 711
- Smooth hemispherical base with no flaws or defects, straight sides and a flat flange
- Graduated in intervals of 50 ml
- Ideal for determining the dissolution characteristics of drugs in capsules and tablets
- Coloured in Amber to protect light-sensitive material
- The Amber colour is applied only to the external surface to prevent contamination with the testing material

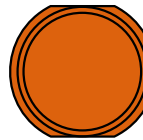
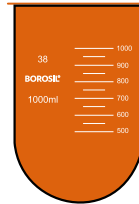


Product Code	Capacity ml	Approx O.D. x Height mm	Quantity Per Case
4267029	1000	131 x 173	6

4268-L-FLASKS

With Side Cut For Dissolution Apparatus
as per USP, Amber, With Certificate

- These vessels conform to all the requirements of USP Ch. 711
- Smooth hemispherical base with no flaws or defects, straight sides and a flat flange
- Two side-cuts at the range
- Graduated in intervals of 50 ml
- Ideal for determining the dissolution characteristics of drugs in capsules and tablets
- Coloured in Amber to protect light-sensitive material
- The Amber colour is applied only to the external surface to prevent contamination with the testing material



Product Code	Capacity ml	Approx O.D. x Height mm	Quantity Per Case
4268029	1000	124 x 173	6

4270-D-FLASKS

for Dissolution Apparatus without side cut,
as per USP with Certificate, with silicon ring

- Vessels confirms to all requirements of USP Ch. 711
- Smooth hemispherical base with no flaws or defects, straight sides and a flat flange
- Graduated in intervals of 50ml
- Ideal for determining the dissolution characteristics of drugs in capsules and tablets



Product Code	Capacity ml	Approx O.D. x Height mm	Quantity Per Case
4270029	1000	132 x 168	6

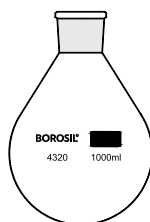


4315 - FLASKS

Boiling, Pear Shaped, Short Neck
with Interchangeable Joint

- Made of 3.3 borosilicate glass
- The conical shape makes them ideal for small scale reaction
- Large labelling field

Product Code	Capacity ml	Interchangeable Joint Size	Quantity Per Case
4315005	5	10 / 19	10
4315105	5	14 / 23	10
4315006	10	10 / 19	10
4315106	10	14 / 23	10
4315009	25	14 / 23	5
4315012	50	14 / 23	10



4320 - FLASKS

Pear Shape Suitable for Rotary
Evaporators with Ground Socket

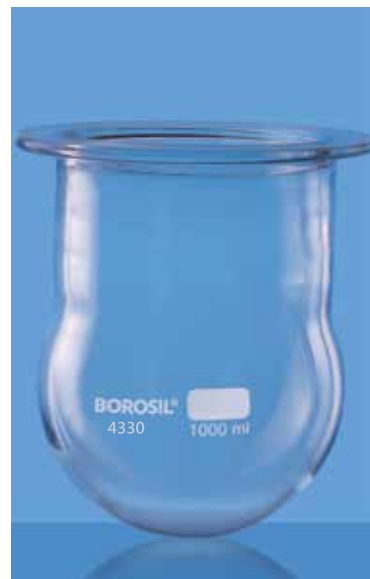
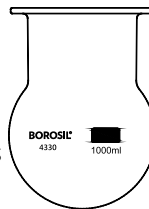
- Rota Vapour Flasks are used along with Rotary Evaporators
- Ideal for heating sensitive solvent solute combinations
- Facilitate the extraction of key components like odour, oil, drugs, natural extract and fragrance

Product Code	Capacity ml	Interchangeable Joint Size	Quantity Per Case
4320112	50	24 / 29	2
4320012	50	29 / 32	2
4320116	100	24 / 29	2
4320016	100	29 / 32	2
4320121	250	24 / 29	2
4320021	250	29 / 32	2
4320124	500	24 / 29	2
4320024	500	29 / 32	2
4320129	1000	24 / 29	2
4320029	1000	29 / 32	2
4320130	2000	24 / 29	2
4320030	2000	29 / 32	2

4330 - FLASKS

(Vessels) Reaction, Wide Mouth
with Flat Flange, 100 mm ID, 150mm OD

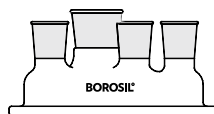
- These Flasks have a spherical body with a neck of inner diameter 4 inches (approx 100 mm)
- The top is finely ground to ensure a leak-resistant fit with the cover



Product Code	Capacity ml	Approx Height mm	Quantity Per Case
4330029	1000	170	2
4330030	2000	205	2
4330033	5000	260	2
4330038	10000	335	1
4330040	20000	400	1

4331-LIDS

for Flasks Reaction Cat No. 4330,
Flat Flange and Inter-changeable Joint



Product Code	Interchangeable Joint Size					Quantity Per Case
	Centre	Parellel	Side 5°	Side 10°	Side 15°	
4331Z97	19 / 26	19 / 26	24 / 29	19 / 26	-	2
4331Z98	19 / 26	14 / 23	14 / 23	14 / 23	29 / 32	2
4331Z99	29 / 32	14 / 23	14 / 23	14 / 23	29 / 32	2





4380 - FLASKS

Boiling, Round Bottom, Short Neck, With Interchangeable Joint, as per ISO 4797

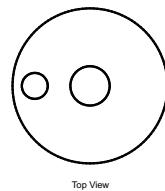
- Made of 3.3 borosilicate glass
- Uniform wall thickness distribution and the round - bottom shape make them ideal for heating
- Generally used in distillation and extraction processes
- Large labelling field

Product Code	Capacity ml	Approx Height mm	Interchangeable Joint	Quantity Per Case
4380A05	5	60	14 / 23	10
4380A06	10	65	14 / 23	10
4380A09	25	75	14 / 23	10
4380B09	25	77	19 / 26	10
4380A12	50	95	14 / 23	5
4380B12	50	95	19 / 26	5
4380C12	50	95	24 / 29	5
4380D12	50	95	29 / 32	5
4380E12	50	95	34 / 35	5
4380A16	100	120	14 / 23	20
4380B16	100	120	19 / 26	20
4380C16	100	120	24 / 29	20
4380D16	100	120	29 / 32	20
4380E16	100	120	34 / 35	20
4380A21	250	140	14 / 23	20
4380B21	250	140	19 / 26	20
4380C21	250	140	24 / 29	20
4380D21	250	140	29 / 32	20
4380E21	250	140	34 / 35	20
4380A24	500	170	14 / 23	10
4380B24	500	170	19 / 26	10
4380C24	500	170	24 / 29	10
4380D24	500	170	29 / 32	10
4380E24	500	170	34 / 35	10
4380A29	1000	210	19 / 26	10
4380B29	1000	210	24 / 29	10
4380C29	1000	210	29 / 32	10
4380D29	1000	210	34 / 35	10
4380E29	1000	210	45 / 40	10
4380F29	1000	210	55 / 44	10
4380A30	2000	240	24 / 29	4
4380B30	2000	240	29 / 32	4
4380C30	2000	240	34 / 35	4
4380D30	2000	240	45 / 40	4
4380A31	3000	240	24 / 29	4
4380B31	3000	265	29 / 32	4
4380C31	3000	265	34 / 35	4
4380D31	3000	265	45 / 40	4
4380E31	3000	265	55 / 44	4
4380A33	5000	300	24 / 29	2
4380B33	5000	300	29 / 32	2
4380C33	5000	300	34 / 35	2
4380D33	5000	300	45 / 40	2
4380E33	5000	300	55 / 44	2
4380A38	10000	385	34 / 35	1
4380B38	10000	385	55 / 44	1
4380C38	10000	385	55 / 44	1
4380A40	20000	435	55 / 44	1

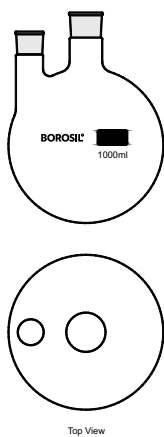
4381 - FLASKS

Round Bottom, Two Necks, Centre Neck and One Angled Side Neck, With Interchangeable Joints, as per ISO 12394

- Uniform wall thickness distribution and the round-bottom shape make them ideal for heating
- The shape facilitates uniform heating
- Accessories, thermometer, column, dropping funnels, boiling capillaries, etc., can be fitted depending upon the application
- Generally used in distillation and extraction processes
- One neck is centred and vertical. The side neck is inclined at an angle of 20° to the vertical neck



Product Code	Capacity ml	Interchangeable Joint Size		Quantity Per Case Side Neck
		Centre	Neck	
4381A16	100	19 / 26	14 / 23	4
4381B16	100	24 / 29	14 / 23	4
4381C16	100	24 / 29	19 / 26	4
4381A21	250	24 / 29	14 / 23	4
4381B21	250	24 / 29	19 / 26	4
4381A24	500	24 / 29	14 / 23	4
4381B24	500	24 / 29	19 / 26	4
4381A29	1000	24 / 29	14 / 23	2
4381B29	1000	24 / 29	19 / 26	2
4381A30	2000	24 / 29	14 / 23	2
4381B30	2000	24 / 29	19 / 26	2
4381C30	2000	34 / 35	19 / 26	2
4381A31	3000	34 / 35	19 / 26	2
4381B31	3000	34 / 35	24 / 29	2
4381A33	5000	34 / 35	19 / 26	1
4381B33	5000	34 / 35	24 / 29	1
4381A38	10000	34 / 35	24 / 29	1
4381B38	10000	55 / 44	24 / 29	1
4381A40	20000	55 / 44	24 / 29	1



4382-FLASKS

Round Bottom, Two Necks, Centre Neck and One Parallel Side Neck, with interchangeable Joints

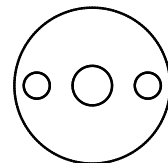
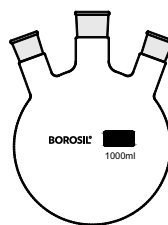
- Uniform wall thickness distribution and the round-bottom shape make them ideal for heating
- The shape facilitates uniform heating
- Accessories, thermometer, column, dropping funnels, boiling capillaries, etc., can be fitted depending upon the application
- Generally used in distillation and extraction processes
- Both the necks are vertical. One neck is centred, while the other is the side neck

Product Code	Capacity ml	Interchangeable Joint Size		Quantity Per Case
		Centre Neck	Side Neck	
4382A16	100	19 / 26	14 / 23	4
4382B16	100	24 / 29	14 / 23	4
4382C16	100	24 / 29	19 / 26	4
4382A21	250	24 / 29	14 / 23	4
4382B21	250	24 / 29	19 / 26	4
4382A24	500	24 / 29	14 / 23	4
4382B24	500	24 / 29	19 / 26	4
4382A29	1000	24 / 29	14 / 23	2
4382B29	1000	24 / 29	19 / 26	2
4382A30	2000	24 / 29	14 / 23	2
4382B30	2000	24 / 29	19 / 26	2
4382C30	2000	34 / 35	19 / 26	2
4382A31	3000	34 / 35	19 / 26	2
4382B31	3000	34 / 35	24 / 29	2
4382A33	5000	34 / 35	19 / 26	1
4382B33	5000	34 / 35	24 / 29	1
4382A38	10000	34 / 35	24 / 29	1
4382B38	10000	55 / 44	24 / 29	1
4382A40	20000	55 / 44	24 / 29	1

4383 - FLASKS

Round Bottom, Three Necks, Centre Neck and Two Angled Side Necks, with interchangeable Joints

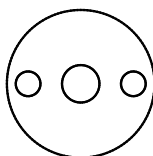
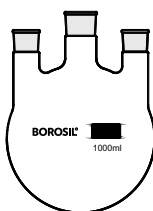
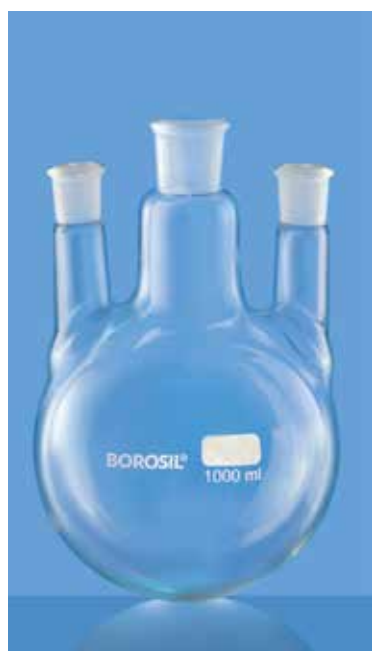
- Uniform wall thickness distribution and round-bottom shape make them ideal for heating
- The shape facilitates uniform heating
- Accessories, thermometer, column, dropping funnels, boiling capillaries, etc. can be fitted depending upon the application
- Generally used in distillation and extraction processes
- The centred neck is vertical. The two side necks are 180° apart and are inclined at an angle of 20° to the vertical neck



Top View



Product Code	Capacity ml	Interchangeable Joint Size			Quantity Per Case
		Centre Neck	Side Neck	Side Neck	
4383A16	100	19 / 26	14 / 23	14 / 23	4
4383B16	100	14 / 23	14 / 23	14 / 23	4
4383C16	100	24 / 29	14 / 23	14 / 23	4
4383D16	100	24 / 29	19 / 26	19 / 26	4
4383A21	250	19 / 26	14 / 23	14 / 23	4
4383B21	250	19 / 26	19 / 26	19 / 26	4
4383C21	250	24 / 29	14 / 23	14 / 23	4
4383D21	250	24 / 29	19 / 26	19 / 26	4
4383A24	500	19 / 26	14 / 23	14 / 23	4
4383B24	500	19 / 26	19 / 26	19 / 26	4
4383C24	500	24 / 29	14 / 23	14 / 23	4
4383D24	500	24 / 29	19 / 26	19 / 26	4
4383A29	1000	24 / 29	14 / 23	14 / 23	2
4383B29	1000	24 / 29	19 / 26	19 / 26	2
4383C29	1000	34 / 35	24 / 29	24 / 29	2
4383D29	1000	34 / 35	19 / 26	19 / 26	2
4383A30	2000	24 / 29	14 / 23	14 / 23	2
4383B30	2000	24 / 29	19 / 26	19 / 26	2
4383C30	2000	34 / 35	19 / 26	19 / 26	2
4383D30	2000	34 / 35	24 / 29	24 / 29	2
4383A31	3000	34 / 35	19 / 26	19 / 26	2
4383B31	3000	34 / 35	24 / 29	24 / 29	2
4383A33	5000	34 / 35	19 / 26	19 / 26	1
4383B33	5000	34 / 35	24 / 29	24 / 29	1
4383C33	5000	45 / 40	24 / 29	24 / 29	1
4383A38	10000	34 / 35	19 / 26	19 / 26	1
4383B38	10000	34 / 35	24 / 29	24 / 29	1
4383C38	10000	45 / 40	24 / 29	24 / 29	1
4383A40	20000	55 / 44	24 / 29	24 / 29	1



Top View

4384 - FLASKS

Round Bottom, Three Necks, Centre Neck and Two Parallel Side Necks with interchangeable Joints

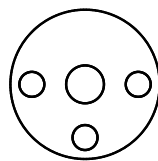
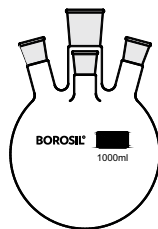
- Uniform wall thickness distribution and round-bottom shape make them ideal for heating
- The shape facilitates uniform heating
- Accessories, thermometer, column, dropping funnels, boiling capillaries, etc. can be fitted depending upon the application
- Generally used in distillation and extraction processes
- All the three necks are vertical. The two side necks are 180° apart

Product Code	Capacity ml	Interchangeable Joint Size			Quantity Per Case
		Centre Neck	Side Neck	Side Neck	
4384A16	100	19 / 26	14 / 23	14 / 23	4
4384B16	100	14 / 23	14 / 23	14 / 23	4
4384C16	100	24 / 29	14 / 23	14 / 23	4
4384D16	100	24 / 29	19 / 26	19 / 26	4
4384A21	250	19 / 26	14 / 23	14 / 23	4
4384B21	250	19 / 26	19 / 26	19 / 26	4
4384C21	250	24 / 29	14 / 23	14 / 23	4
4384D21	250	24 / 29	19 / 26	19 / 26	4
4384A24	500	19 / 26	14 / 23	14 / 23	4
4384B24	500	19 / 26	19 / 26	19 / 26	4
4384C24	500	24 / 29	14 / 23	14 / 23	4
4384D24	500	24 / 29	19 / 26	19 / 26	4
4384A29	1000	24 / 29	14 / 23	14 / 23	2
4384B29	1000	24 / 29	19 / 29	19 / 26	2
4384C29	1000	34 / 35	24 / 29	24 / 29	2
4384D29	1000	34 / 35	19 / 26	19 / 26	2
4384A30	2000	24 / 29	14 / 23	14 / 23	2
4384B30	2000	24 / 29	19 / 26	19 / 26	2
4384C30	2000	34 / 35	19 / 26	19 / 26	2
4384D30	2000	34 / 35	24 / 29	24 / 29	2
4384A31	3000	34 / 35	19 / 26	19 / 26	2
4384B31	3000	34 / 35	24 / 29	24 / 29	2
4384A33	5000	34 / 35	19 / 26	19 / 26	1
4384B33	5000	34 / 35	24 / 29	24 / 29	1
4384C33	5000	45 / 40	24 / 29	24 / 29	1
4384A38	10000	34 / 35	19 / 26	19 / 26	1
4384B38	10000	34 / 35	24 / 29	24 / 29	1
4384C38	10000	45 / 40	24 / 29	24 / 29	1
4384A40	20000	55 / 44	24 / 29	24 / 29	1

4385-FLASKS

Round Bottom, Four Necks, Centre Neck and Three Angled Side Neck, with Interchangeable Joints

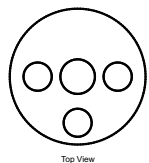
- Uniform wall thickness distribution and round-bottom shape make them ideal for heating
- The shape facilitates uniform heating
- Accessories, thermometer, column, dropping funnels, boiling capillaries, etc. can be fitted depending upon the application
- Generally used in distillation and extraction processes
- The centred neck is vertical. All the three side necks are inclined at an angle of 20° to the vertical neck
- The two side necks are 180° apart, and a third side neck is at 90° from the other two necks



Top View



Product Code	Capacity ml	Interchangeable Joint Size		Quantity Per Case
		Centre Neck	Side Neck	
4385A12	50	24 / 29	24 / 29	4
4385A16	100	24 / 29	14 / 23	4
4385B16	100	24 / 29	19 / 26	4
4385A21	250	24 / 29	14 / 23	4
4385B21	250	24 / 29	19 / 26	4
4385A24	500	24 / 29	14 / 23	4
4385B24	500	24 / 29	19 / 26	4
4385C24	500	24 / 29	24 / 29	4
4385D24	500	34 / 35	24 / 29	4
4385A29	1000	24 / 29	14 / 23	2
4385B29	1000	24 / 29	19 / 26	2
4385C29	1000	24 / 29	24 / 29	2
4385D29	1000	34 / 35	24 / 29	2
4385A30	2000	24 / 29	14 / 23	2
4385B30	2000	24 / 29	19 / 26	2
4385C30	2000	34 / 35	19 / 26	2
4385D30	2000	34 / 35	24 / 29	2
4385A31	3000	34 / 35	19 / 26	2
4385B31	3000	34 / 35	24 / 29	2
4385A33	5000	34 / 35	19 / 26	1
4385B33	5000	34 / 35	24 / 29	1
4385A38	10000	55 / 44	24 / 29	1
4385B38	10000	34 / 35	24 / 29	1
4385A40	20000	55 / 44	24 / 29	1

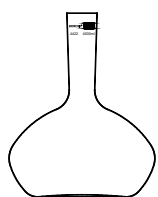


4386 - FLASKS, ROUND BOTTOM

Four Necks, Centre Neck and Three Parallel Side Neck, with Interchangeable Joints

- Uniform wall thickness distribution and the round-bottom shape make them ideal for heating
- The shape facilitates uniform heating
- Accessories, thermometer, column, dropping funnels, boiling capillaries, etc. can be fitted depending upon the application
- Generally used in distillation and extraction processes
- All the four necks are vertical. The two side necks are 180° apart
- The third neck is at 90° from the other two necks

Product Code	Capacity ml	Interchangeable Joint Size		Quantity Per Case
		Centre Neck	Side Neck	
4386A12	50	24 / 29	24 / 29	4
4386A16	100	24 / 29	14 / 23	4
4386B16	100	24 / 29	19 / 26	4
4386A21	250	24 / 29	14 / 23	4
4386B21	250	24 / 29	19 / 26	4
4386A24	500	24 / 29	14 / 23	4
4386B24	500	24 / 29	19 / 26	4
4386C24	500	24 / 29	24 / 29	4
4386D24	500	34 / 35	24 / 29	4
4386A29	1000	24 / 29	14 / 23	2
4386B29	1000	24 / 29	19 / 26	2
4386C29	1000	24 / 29	24 / 29	2
4386D29	1000	34 / 35	24 / 29	2
4386A30	2000	24 / 29	14 / 23	2
4386B30	2000	24 / 29	19 / 26	2
4386C30	2000	34 / 35	19 / 26	2
4386D30	2000	34 / 35	24 / 29	2
4386A31	3000	34 / 35	19 / 26	2
4386B31	3000	34 / 35	24 / 29	2
4386A33	5000	34 / 35	19 / 26	1
4386B33	5000	34 / 35	24 / 29	1
4386A38	10000	55 / 44	24 / 29	1
4386B38	10000	34 / 35	24 / 29	1
4386A40	20000	55 / 44	24 / 29	1



4422 - FLASKS

Culture, Haffkin

- Complies with IS 7183
- The large, flat bottom surface ensures uniform culture growth
- Typically used for the preparation of culture in nutrient media

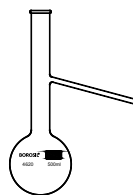
Product Code	Capacity ml	Approx O.D. x Height mm	Quantity Per Case
4422031	3000*	245 x 280	2
4422032	4000	246 x 310	2

*3000 ml not covered in standards

4620 - FLASKS

Distilling, With Side Arm

- Complies with IS 2620
- Uniform wall thickness distribution makes these Flasks ideal for heating
- Suitable for distillation process



Product Code	Capacity ml	Approx O.D. x Height mm	Approx Neck O.D. mm	Quantity Per Case
4620016	100	64 x 210	21	4
4620017	*125	70 x 215	21	4
4620021	250	85 x 230	25	4
4620024	500	105 x 250	28	4
4620029	1000	130 x 305	31	4

* Specification as per the Institute of Petroleum Standard No. IP 123/64

4621 - FLASKS, ASTM

Distilling with I/C joint 19/26 as per ASTM D86



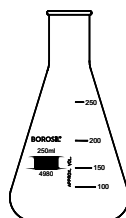
Product Code	Capacity ml	Approx O.D. x Height mm	Approx Neck I. D.	Inter-changeable Joint	Quantity Per Case
4621017	125	70 x 218	19	19 / 26	20

Flasks

4980 - FLASKS

Erlenmeyer, Conical, Narrow Mouth

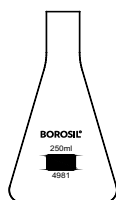
- Complies with IS 1381(Part I), DIN / ISO 1773
- Uniform wall thickness distribution makes these Flasks ideal for heating
- The conical form makes them suitable for mixing liquids
- The easy-to-read scale and large labelling field facilitate easy marking
- Graduated from 25 ml to 5000 ml



Product Code	Capacity ml	Approx O.D. x Height mm	Approx Neck O.D. mm	Quantity Per Case
4980006	10*	37 x 60	15	30
4980009	25	42 x 75	22	40
4980012	50	51 x 90	22	100
4980016	100	64 x 105	22	100
4980017	125*	66 x 110	28	100
4980018	150*	72 x 124	28	100
4980021	250	85 x 145	34	40
4980024	500	105 x 180	34	40
4980029	1000	131 x 220	50	20
4980030	2000	166 x 280	52	20
4980031	3000	187 x 310	50	4
4980033	5000	220 x 365	50	2

25 ml to 5000 ml Graduated

*Not covered in standards



4981 - FLASKS

Erlenmeyer, Conical, Long Neck without Rim

- Uniform wall thickness distribution makes these Flasks ideal for heating
- Ideal for culture work
- Long neck designed for cotton plugs and metal caps
- The conical form makes them suitable for mixing liquids
- The easy-to-read scale and large labelling field facilitate easy marking

Product Code	Capacity ml	Approx O.D. x Height mm	Approx Neck O.D. mm	Quantity Per Case
4981021	250	78 x 154	27	10

Suitable for culture work, designed for cotton plug or metal caps



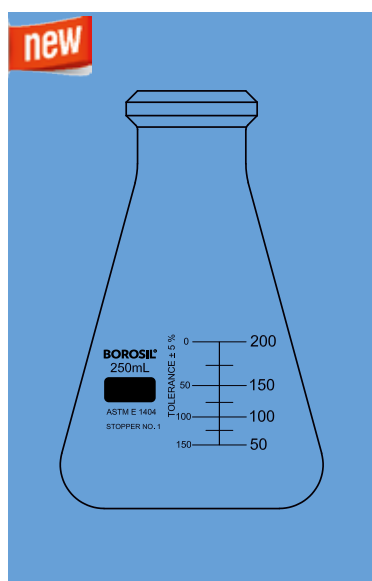
4982 - FLASKS

Conical, Without Rim

- Uniform wall thickness distribution makes these Flasks ideal for heating
- Ideal for culture work
- Designed without a rim for use in the shaker machine
- The conical form makes them suitable for mixing liquids
- The easy-to-read scale and large labelling field facilitate easy marking

Product Code	Capacity ml	Approx O.D. x Height mm	Approx Neck O.D. mm	Quantity Per Case
4982027	750	114 x 210	42	10

Suitable for culture work, designed for use in shaker machine



4985 - FLASKS ASTM

Narrow mouth, Erlenmeyer Flasks

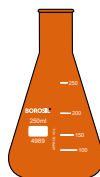
- Manufactured from 33 expansion borosilicate glass conforming to ASTM E438 Type I, class A
- Designed from ASTM E1404 Type I Class I requirements
- Tooled neck to provide more mechanical strength
- Uniform wall thickness makes these flasks ideal for heating
- Graduated flasks with dual white ceramic graduation
- Graduation starts from 25 ml

Product Code	Capacity ml	Approx O.D. x Height mm	Stopper Number	Quantity Per Case
4985009	25	42 x 67	0	48
4985012	50	52 x 83	1	48
4995017	125	68 x 111	5	48
4985021	250	83 x 133	6	48
4985022	300	90 x 146	6	48
4985024	500	103 x 177	7	36
4895029	1000	131 x 222	9	24

4989 - FLASKS

Erlenmeyer, Graduated, Conical, Amber with Narrow Mouth

- Complies with IS 1381 (Part I), DIN / ISO 1773
- Uniform wall thickness distribution makes these Flasks ideal for heating
- The conical form makes them suitable for mixing liquids
- The easy-to-read scale and large labelling field facilitate easy marking
- Graduated from 25 ml to 5000 ml
- Coloured in Amber to protect light-sensitive material
- The Amber colour is applied only to the external surface to prevent contamination with the testing material



Product Code	Capacity ml	Approx O.D. x Height mm	Approx Neck O.D. mm	Quantity Per Case
4989016	100	64 x 105	22	10
4989018	150*	72 x 124	28	10
4989021	250	85 x 145	34	10
4989024	500	104 x 180	34	10
4989029	1000	131 x 220	42	10

Similar in design to Cat. No. 4980

* Not covered in standards

5015 - FLASKS

Tilt Measure

- Ideal for dispensing fixed volume of liquid
- Easy to use
 - Tilt the unit backward to fill
 - Tilt the unit forward to dispense
- Accuracy $\pm 5\%$ can be achieved
- Manufactured from chemically resistance 3.3 borosilicate tubing



Product Code	Capacity ml	Flask Capacity ml	Quantity Per Case
5015005	5	100	5
5015006	10	250	5
5015008	20	250	10
5015009	25	250	10
5015012	50	250	10

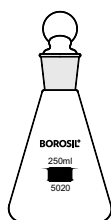
5019 - FLASKS

Erlenmeyer, Conical, Narrow Mouth with Interchangeable Stopper, Amber

- The conical form makes them suitable for mixing of liquids
- These Flasks can be closed with a glass stopper
- Coloured in Amber to protect light-sensitive material
- The Amber colour is applied only to the external surface to prevent contamination with the testing material



Product Code	Capacity ml	Interchangeable Joint	Quantity Per Case
5019009	25	14 / 23	10
5019012	50	19 / 26	10
5019016	100	24 / 29	20
5019021	250	24 / 29	20
5019024	500	24 / 29	10



5020 - FLASKS

Erlenmeyer, Conical, Narrow Mouth with Interchangeable Stopper

- The conical form makes them suitable for mixing of liquid
- These Flasks can be closed with a glass stopper

Product Code	Capacity ml	Interchangeable Joint	Quantity Per Case
5020009	25	14 / 23	10
5020012	50	19 / 26	10
5020016	100	24 / 29	20
5020021	250	24 / 29	20
5020024	500	24 / 29	10
5020029	1000	29 / 32	10
5020030	2000	29 / 32	10

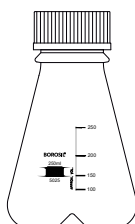
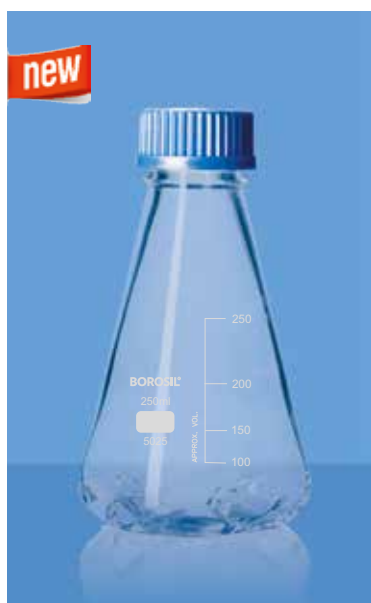


5021 - FLASKS

Conical with Screw Cap

- The conical form makes them suitable for mixing of liquids
- These Flasks can be closed with a screw cap
- The caps are made of PP

Product Code	Capacity ml	Neck Specification	Quantity Per Case
5021016	100	GL 25	20
5021018	150	GL 25	20
5021021	250	GL 45	20
5021024	500	GL 45	10
5021029	1000	GL 45	10
5021030	2000	GL 45	10
5021033	5000	GL 45	2



5025 - ERLLENMEYER BAFFLED - GL 45

Erlenmeyer, Conical, Wide Mouth

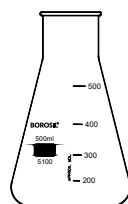
- The conical for makes them suitable for mixing of liquids
- These flasks can be closed with a screw cap
- These caps are made of PP

Product Code	Capacity ml	Neck Specification	Quantity Per Case
5025021	250	GL 45	10
5025024	500	GL 45	10
5025029	1000	GL 45	10
5025030	2000	GL 45	10

5100 - FLASKS

Erlenmeyer, Conical, Wide Mouth, as per ISO 24450

- Complies with IS 1381
- Uniform wall thickness distribution makes these Flasks ideal for heating
- The conical form makes them suitable for mixing of liquids
- The easy-to-read scale and large labelling field facilitate easy marking
- Designed with a wide neck that makes cleaning and filling easier



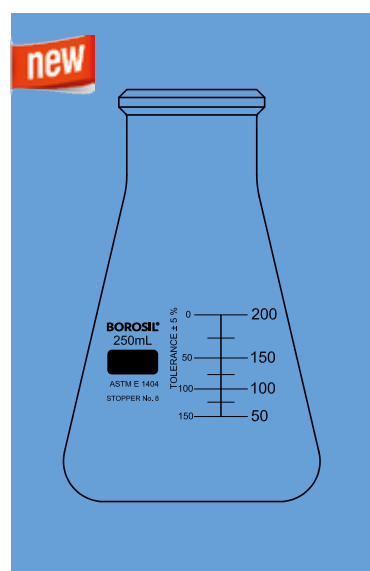
Product Code	Capacity ml	Approx O.D. x Height mm	Approx Neck O.D. mm	Quantity Per Case
5100012D	50	51 x 85	34	40
5100016D	100	70 x 110	34	20
5100021D	250	85 x 142	50	30
5100024D	500	105 x 175	50	20
5100029D	1000	130 x 220	56	10
5100030D	2000	153 x 276	72	10

5102 - FLASKS ASTM

Wide Mouth Erlenmeyer Flasks

- Manufactured from 33 expansion borosilicate glass conforming to ASTM E438 Type I, class A
- Designed from ASTM E1404 Type I Class II requirements
- Tooled neck to provide more mechanical strength
- Graduated flasks with dual white ceramic graduation

Product Code	Capacity ml	Approx O.D. x Height mm	Stopper Number	Quantity Per Case
5102017	125	68 x 111	6	48
5102021	250	83 x 133	8	48
5102024	500	105 x 186	10	36
5102024	1000	131 x 222	11	24

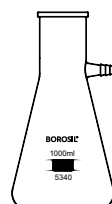


Flasks

5340 - FLASKS

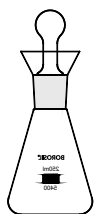
Filtering, Bolt Neck, with Tubulation, as per ISO 6556

- These Flasks are blown in special moulds
- The shape is designed to impart maximum mechanical strength
- The neck finish is designed for strength and to ensure good stopper fit
- Ideal for use with Bucher Funnel Category No. 36060 and Gooch Crucible No. 32060 with Sintered Discs that have different porosities



Product Code	Capacity ml	Approx O.D. x Height mm	Quantity Per Case
5340012	50	52 x 86	30
5340016	100	70 x 105	20
5340021	250	85 x 155	10
5340024	500	105 x 188	20
5340029	1000	135 x 230	10
5340030	2000	165 x 255	5
5340033	5000	185 x 360	2
5340038	10000*	236 x 420	1
5340040	20000*	285 x 535	1

*These flasks are bottle shaped

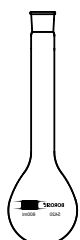


5400-FLASKS

Iodine Determination, with Interchangeable Stopper

- These Flasks are made especially for the determination of Iodine value according to the methods of ASTM D-29
- Large labelling field for easy marking
- The handle of the stopper projects above the liquid seal, facilitating its removal

Product Code	Capacity ml	Interchangeable Joint Size	Quantity Per Case
5400016	100	24 / 29	10
5400021	250	24 / 29	10
5400024	500	24 / 29	10

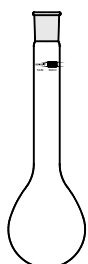


5420 - FLASKS

Kjeldahl, Round Bottom, Long Neck

- These Flasks are specially designed for nitrogen/protein determination as per the Kjeldahl method
- Designed with a tooled neck for greater strength and a better stopper fit

Product Code	Capacity ml	Approx O.D. x Height mm	Quantity Per Case
5420006	10	30 x 180	10
5420010	30	40 x 180	10
5420016	100	61 x 210	10
5420022	300	80 x 298	10
5420024	500	100 x 325	10
5420028	800	113 x 375	10



5430 - FLASKS

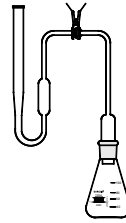
Kjeldahl, Round Bottom, Interchangeable Joint

- These Flasks are specially designed for nitrogen/protein determination as per Kjeldahl method.
- Designed with a tooled neck for greater strength and better stopper fit
- The Flask with 500ml capacity is a part of Ammonia Distilling Apparatus Category No. 3340

Product Code	Capacity ml	Approx O.D. x Height mm	Interchangeable Joint Size	Quantity Per Case
5430024	500	100 x 320	24 / 29	10
5430028	800	113 x 375	24 / 29	10

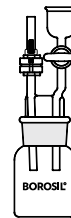
5200 - ARSENIC DETERMINATION APPARATUS AS PER USP

Product Code	Quantity Per Case
5200001	1



5201 - ARSENIC DETERMINATION APPARATUS GUTZEIT

Product Code	Quantity Per Case
5201001	1



5203 - ARSENIC DETERMINATION APPARATUS AS PER IP

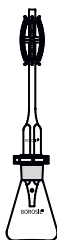
Product Code	Quantity Per Case
5203001	1





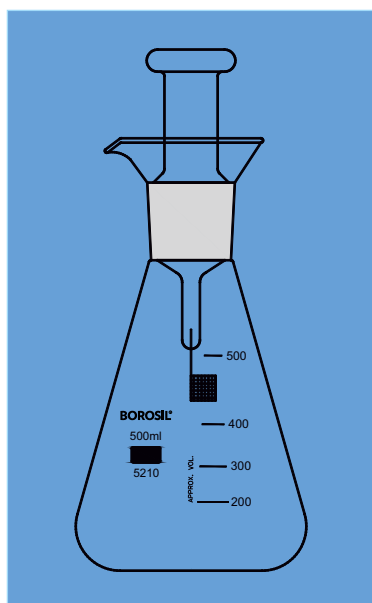
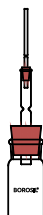
5202 - ARSENIC DETERMINATION APPARATUS AS PER BP

Product Code	Quantity Per Case
5202001	1



5204 - ARSENIC DETERMINATION APPARATUS AS PER IS

Product Code	Quantity Per Case
5204001	1



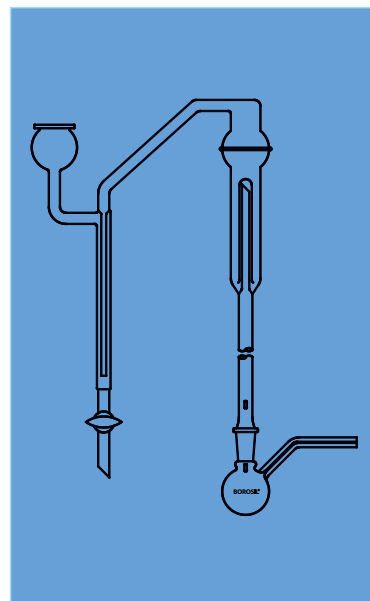
5210 - OXYGEN COMBUSTION FLASK AS PER USP

- Complies to ASTM E205 - 96
- Manufactured from 3.3 borosilicate, USP Type I glass
- Used for the determination of bromine, chlorine, iodine and sulphur

Product Code	Capacity ml	Quantity Per Case
5210022	300	1
5210024	500	1

5211 - METHOXY DETERMINATION ASSEMBLY AS PER USP

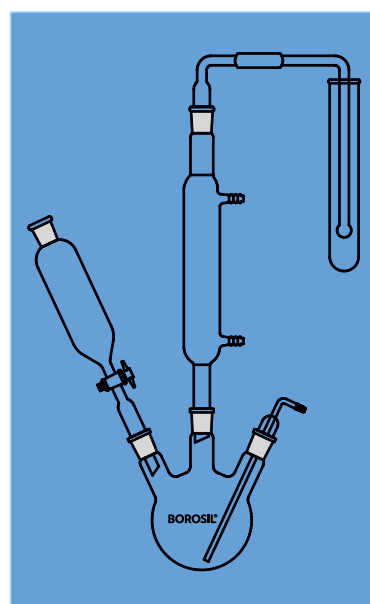
Product Code	Quantity Per Case
5211024	1



Flasks

5212 - SULPHUR DI-OXIDE ASSEMBLY AS PER USP

Product Code	Quantity Per Case
5212024	1



Filtration Assembly

- HPLC Mobile Phase Filtration
- Analysis of Particulate / bacterial contamination & general laboratory micro-filtration
- Units have G3 coarse porosit Frits & accomodate 47 mm filters / 25 mm filters
- All glass design ensures Chemical Compatibility with Most of the Organic Solvents.

Application :

- Used for Filtration of HPLC solvents and aqueous mobile phase solutions and buffers.

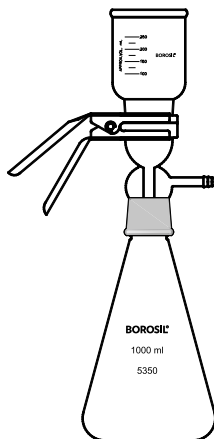
Specifications :

- 100% Borosilicate Glass with fritted glass filter base. Base design has integral vacuum connection located above filtrate drip to prevent contamination of vacuum line with droplets.
- Anodized Aluminum Spring clamp
- Filter Size : 47mm
- Effective Filtration Area : 9.6 cm²
- Funnel Capacity : 300 ml
- Flask Capacity : 500 ml / 1 Lit / 2 Ltr / 5 Ltr



5350 - ALL GLASS FILTER HOLDER - 47MM, Filtration Assembly

- Made of borosilicate glass with fritted glass filter base
- The base design has an integral vacuum connection located above the filtrate drip to prevent contamination of the vacuum line from droplets
- Anodised aluminium spring clamp
- The filter size is 47 mm
- The effective filtration area is 9.6 cm²
- Used for filtration of HPLC solvents and aqueous mobile phase solutions and buffers
- The scaled funnels simplify dosing and analysis



Product Code	Capacity ml	Filtration Base Size mm	Quantity Per Case	HSN Code
5350024	500	47	1	70179090
5350029	1000	47	1	70179090
5350030	2000	47	1	70179090

SPARES FOR 5350 - 47MM

Product Code	Capacity ml	Description	HSN Code
5350124	500 ml	Flask For Filter Holder	70179090
5350129	1000 ml	Flask For Filter Holder	70179090
5350130	2000 ml	Flask For Filter Holder	70179090
5350S01	300 ml	Funnel For Filter Holder	70179090
5350S02	47 mm	Filter Support Base For Filter Holder	70179090
5350S03	47 mm	Aluminium Clamp for Filter Holder	76169990

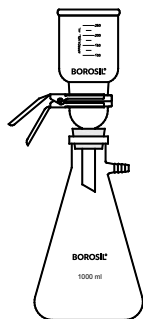
5350 - ALL GLASS FILTRATION ASSEMBLY - 90MM

Product Code	Capacity ml	Filtration Base Size mm	Quantity Per Case	HSN Code
5350033	5000	90	1	70179090

SPARES FOR 5350 - 90 MM

Product Code	Capacity ml	Description	HSN Code
5350133	5000 ml	Flask For Filter Holder With B 55 Cone	70179090
5350233	1000 ml	Funnel For Filter Holder Flask	70179090
5350333	90 mm	Filter Support Base For Filter Holder	70179090
5350433	90 mm	Aluminium Clamp for Filter Holder	76169990

Filtration Assembly



5360-ALL GLASS FILTER HOLDER

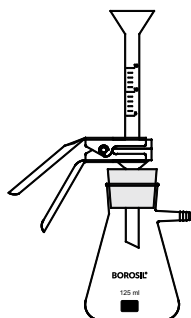
Silicon Stopper-47mm, Filtration Assembly

- Made of borosilicate glass with fritted glass filter base
- The base design has an integral vacuum connection located above the filtrate drip to prevent contamination of the vacuum line from droplets
- The filtration base has a silicon stopper
- Anodised aluminium spring clamp
- The filter size is 47mm
- The effective filtration area is 9.6 cm²
- Facilitates analysis of particulate or biological contamination of vacuum filtering liquid
- The scaled funnels simplify dosing and analysis

Product Code	Capacity ml	Filtration Base Size mm	Quantity Per Case	HSN Code
5360029	1000	47	1	70179090
5360030	2000	47	1	70179090

SPARES FOR 5360 - 47 MM

Product Code	Capacity ml	Description	HSN Code
5360129	1000 ml	Flask For Filter Holder	70179090
5360130	2000 ml	Flask For Filter Holder	70179090
5350S01	300 ml	Funnel For Filter Holder	70179090
5360S02	47 mm	Filter Support Base For Filter Holder With Silicon	70179090
5350S03	47 mm	Aluminium Clamp for Filter Holder	76169990



5370 - ALL GLASS FILTRATION ASSEMBLY

Silicon Stopper - 25 mm

- Made of borosilicate glass with fritted glass filter base
- The base design has an integral vacuum connection located above the filtrate drip to prevent contamination of the vacuum line from droplets
- The filtration base has a silicon stopper
- Anodised aluminium spring clamp
- The filter size is 25 mm
- The effective filtration area is 9.6 cm²
- Facilitates analysis of particulate or biological contamination of vacuum filtering liquid
- The scaled funnels simplify dosing and analysis

Product Code	Capacity ml	Filtration Base Size mm	Quantity Per Case	HSN Code
5370017	125	25	1	70179090

SPARES FOR 5370 - 25 MM

Product Code	Capacity ml	Description	HSN Code
5370S01	125 ml	Flask For Filter Holder	70179090
5370S02	15 ml	Funnel For Filter Holder	70179090
5370S03	25 mm	Filter Support Base For Filter Holder With Silicon stopper	70179090
5370S04	25mm	Aluminium Clamp for Filter Holder	76169990

Vacuum Pump - Oil Free



- BORO - 017 vacuum pump is a piston-powered, oil-free pump. With innovative electronic, mechanical technology and human design concept make, compact and light weight, clean and maintenance free, safe and comfortable.
- BORO - 017 vacuum pump are driven by Piston, without the need of lubricant, regular oil changes and maintenance; with no oil pollution
- BORO - 017 vacuum pump are equipped with filter cartridge in air inlet to filter particle and moisture to prolong the life of pump.
- BORO - 017 vacuum pump are equipped with vacuum regulator to adjust vacuum.
- Every motor of BORO - 017 vacuum pump has a built in thermal protection device to shut off the pump automatically when overheated and then resume working when the temperature cools down.



Application areas :

- Biology Laboratories
- Food Industry
- Liquid filtration
- Microbiological detection
- Suspended solids measurement
- Vacuum drying
- Vacuum extraction

Vacuum Pump

Ordering Information

Model	BORO - 017
Power (V / Hz)	220 / 50
Max. power (W)	60
Max. current (A)	0.3
Max. vacuum (mbar)	100
Max. flow rate (L/min)	17
Motor rotation (RPM)	1450
Port thread (mm)	9
Dimension W x D x H (mm)	272 x 142 x 165
Weight (kg)	4.4
Noise level (dB)	50
Product Code	100VP300017

Caution :

Please do not use this vacuum pump with any corrosive chemicals such as Acid, Alkali & Organic Air. Avoid any material or liquid sucked down into the pump that will cause serious damage.

Volumetric Flask

As the field of chemistry evolves with more research & educational institutions as well as industrial applications expanding day by day, the need for high quality glassware has been felt more than ever before. Be it the preparation of standard solutions or making the right volume with appropriate calibration, Volumetric Glassware offers the right mix of quality and efficiency for numerous objectives.

- Manufactured from 3.3 Low Expansion Borosilicate I. D. control tubing
- Individually calibrated with automatic calibration process
- Comes with highest quality standards according to EN ISO 1042 & ASTM (E 288)
- It also complies USP guide lines
- Strict quality control through all steps eliminate possible deviations from nominal volume
- Supplied with individual certificate which can be downloaded from our website also
- Volumetric Flasks are supplied with plastic or solid glass stopper



Volumetric Flasks is a laboratory glassware that is designed to hold a certain volume at a particular temperature and indicates the nominal volume, tolerance, precision class, relevant manufacturing standard etc. The Volumetric Flasks are manufactured in a range of sizes that is capable of containing 1 to 5,000 ml of liquid.

It is very important to understand that for analysis that demands high precision, the selection of instruments is very vital. And in cases where precision analysis is expected, only high accuracy instruments give the desired results. Most sophisticated automatic instruments can deliver high precision results, only if the volumetric ware used to prepare samples is accurate.

Borosil volumetric flasks are designed to give the best combination of thermal shock resistance, physical strength and resistance to chemical attack. They are made to withstand the demands of the modern laboratory and are particularly suitable for all glass apparatus assemblies.

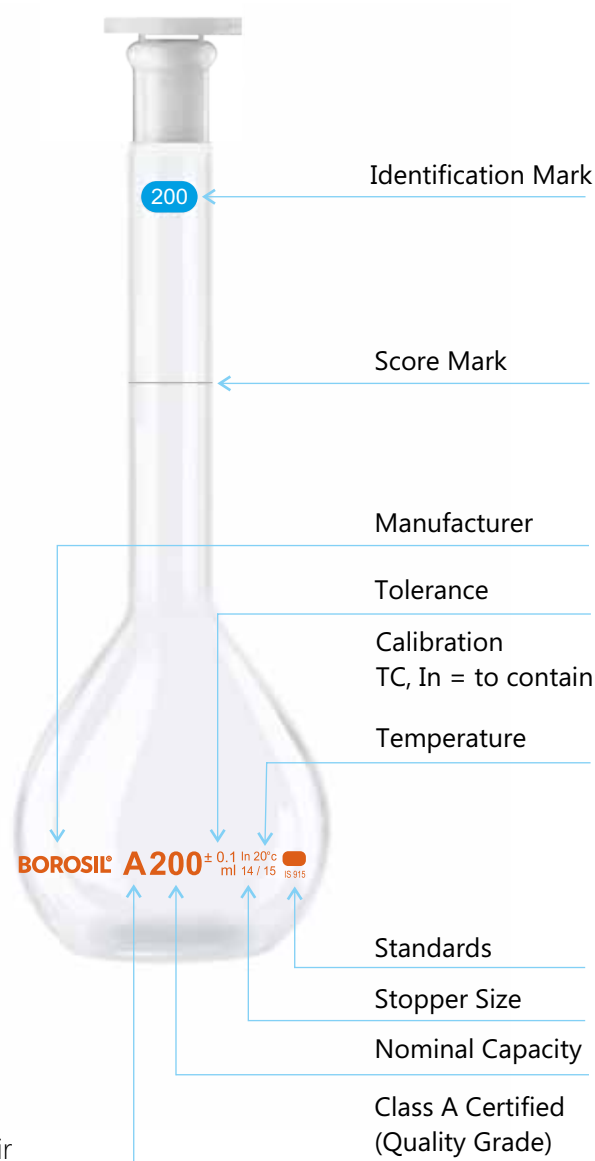
Calibration:

- Every Volumetric Flask is calibrated on fully automatic computer controlled calibration machine, eliminating the manual error in reading the meniscus, thereby giving more accurate volume
- Each Volumetric Flask is individually calibrated and is provided with unique Code No. and supplied with individual Certificate

Printing:

- All Volumetric Flasks are printed with permanent amber colour
- The amber Volumetric Flasks are printed with white ceramic enamel

At **Borosil** we understand that different needs require different solutions. Hence we offer our clients a wide range of flasks, designed to meet their individual requirements, while ensuring optimum



Volumetric Flasks
 Funnels
 Gas Generator
 Jars & Kettles

BOROSIL®

INTRODUCING

NEW

Easy to Scan

QR CODE on Graduated ware



Traceability

Easy to access data

These flasks available on request

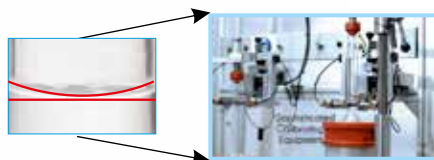


Volumetric Flasks



On line
Certificate
available on
our Website
www.borosil.com

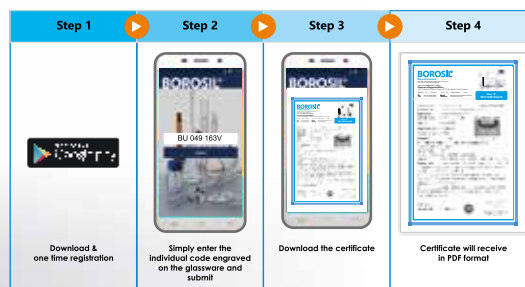
Individually Calibrated Volumetric Flasks with actual meniscus photograph



State of the art calibration

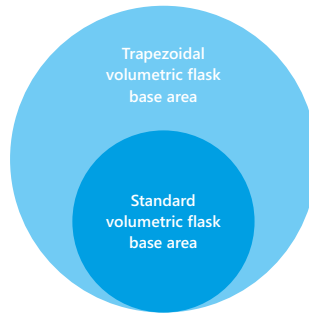
- Laser identification of meniscus
- Actual photo of individual meniscus captured on certificates (for 5ml to 100 ml)

Now ACCESS your
BOROSIL glassware certification
from anywhere, anytime....



Download the **BOROSIL®** app

Trapezoidal Volumetric Flask



Volumetric flasks with small capacities can be topple down more easily due to their higher centre of gravity.

Trapezoidal volumetric flasks have much larger base area which ensures higher stability. It has atleast twice base area compare to standard volumetric flask of the same capacity.

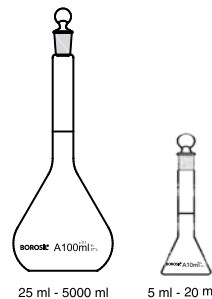
* 5/10/20 ml available



5640 - VOLUMETRIC FLASKS

Volumetric Flask with Interchangeable Solid Glass Stopper, Accuracy as per Class A, with Certificate

- Complies with EN ISO 1042
- Each flask is marked with serial number and supplied with certificate of calibration traceable to National standards
- Manufactured from 3.3 borosilicate, USP Type I glass
- Amber enamel inscriptions

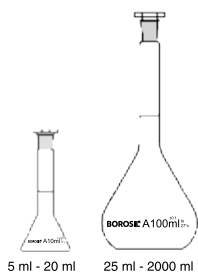


Volumetric Flask

Product Code		Capacity ml	Tolerance +ml	Stopper Size	Quantity Per Case
Batch Certified	Individually Certified				
5640001A	5640001D	1	0.025	7 / 16	5
5640002A	5640002D	2	0.025	7 / 16	5
5640005A	5640005D	5	0.025	7 / 16	5
5640006A	5640006D	10	0.025	7 / 16	5
5640008A	5640008D	20	0.04	10 / 19	5
5640009A	5640009D	25	0.04	10 / 19	5
5640012A	5640012D	50	0.06	12 / 21	10
5640016A	5640016D	100	0.1	14 / 23	10
5640020A	5640020D	200	0.15	14 / 23	10
5640021A	5640021D	250	0.15	14 / 23	10
5640024A	5640024D	500	0.25	19 / 26	10
5640029A	5640029D	1000	0.4	24 / 29	10
5640030A	5640030D	2000	0.6	29 / 32	2
5640033A	5640033D	5000	1.2	34 / 3	51

- 1 ml to 20 ml supplied with trapezoidal shape for better stability

- Certified and Calibrated at 20°C



5646 - VOLUMETRIC FLASK

Volumetric Flasks with Interchangeable PP Stopper Accuracy as per Class A , with Certificate

- Complies with EN ISO 1042
- Manufactured from 3.3 borosilicate USP Type I glass

Product Code		Capacity ml	Tolerance ±ml	Stopper Size	Quantity Per Case
Batch Certified	Individually Certified				
5646001A	5646001D	1*	0.025	7 / 16	5
5646002A	5646002D	2*	0.025	7 / 16	5
5646005A	5646005D	5	0.025	7 / 16	5
5646006A	5646006D	10	0.025	7 / 16	5
5646008A	5646008D	20	0.04	10 / 19	5
5646009A	5646009D	25	0.04	10 / 19	5
5646012A	5646012D	50	0.06	12 / 21	10
5646016A	5646016D	100	0.10	14 / 23	10
5646020A	5646020D	200	0.15	14 / 23	10
5646021A	5646021D	250	0.15	14 / 23	10
5646024A	5646024D	500	0.25	19 / 26	10
5646029A	5646029D	1000	0.40	24 / 29	10
5646030A	5646030D	2000	0.60	29 / 32	2
5646033A	5646033D	5000	1.20	34 / 35	2

- * 1ml and 2 ml neck size is as per Borosil design
- 5 ml to 20 ml supplied with trapezoidal shape for better stability
- **Certified and Calibrated at 20°C.**



5648 - VOLUMETRIC FLASKS, AMBER

Volumetric Flasks with Interchangeable PP Stopper Accuracy as per Class A Amber, with Certificate

- Complies with EN ISO 1042
- Each flask marked with serial number and supplied with certificate of Comes with Individually Certified products, on request
- Manufactured from 3.3 borosilicate USP Type I glass with an amber coating on exterior surfaces to facilitate use with light sensitive solutions
- White enamel inscriptions

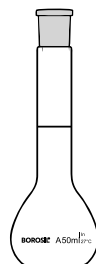
Product Code		Capacity ml	Tolerance ±ml	Stopper Size	Quantity Per Case
Batch Certified	Individually Certified				
5648P05A	5648P05D	5	0.025	7 / 16	5
5648P06A	5648P06D	10	0.025	7 / 16	5
5648P08A	5648P08D	20	0.04	10 / 19	5
5648P09A	5648P09D	25	0.04	10 / 19	5
5648P12A	5648P12D	50	0.06	12 / 21	10
5648P16A	5648P16D	100	0.1	14 / 23	10
5648P20A	5648P20D	200	0.15	14 / 23	10
5648P21A	5648P21D	250	0.15	14 / 23	10
5648P24A	5648P24D	500	0.25	19 / 26	10
5648P29A	5648P29D	1000	0.4	24 / 29	10
5648P30A	5648P30D	2000	0.6	29 / 32	2

- 5 ml to 20 ml supplied with trapezoidal shape for better stability
- **Certified and Calibrated at 20°C**

5643 - WIDE MOUTH VOLUMETRIC FLASK

Wide Mouth Volumetric Flasks with Interchangeable PP Stopper Class A, with Certificate

- Complies with EN ISO 1042
- Manufactured from 3.3 borosilicate, USP Type I glass
- Each flask marked with serial number and supplied with certificate of calibration comes with Individually certified products on request
- Specially designed wide mouth for testing bigger dia. Tablet without making it in powder form



Product Code		Capacity ml	Tolerance ±ml	Stopper Size	Quantity Per Case
Batch Certified	Individually Certified				
5643P05A	5643P05D	5	0.04	10 / 19	5
5643P06A	5643P06D	10	0.04	10 / 19	5
5643P08A	5643P08D	20	0.06	12 / 21	5
5643P09A	5643P09D	25*	0.06	14 / 23	5
5643T09A	5643T09D	25	0.06	12 / 21	5
5643P12A	5643P12D	50	0.1	14 / 23	10
5643P16A	5643P16D	100*	0.1	19 / 26	10
5643P20A	5643P20D	200*	0.15	19 / 26	10
5643P21A	5643P21D	250*	0.15	19 / 26	10
5643P29A	5643P29D	1000	0.6	29 / 32	10

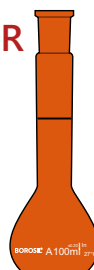
- * Not covered in the standards
- 5 ml to 20 ml supplied with trapezoidal shape for better stability
- **Certified and Calibrated at 20°C**



5653 - WIDE MOUTH, VOLUMETRIC FLASKS, AMBER

Wide Mouth Volumetric Flasks with Interchangeable PP Stopper, Class A, Amber with Certificate

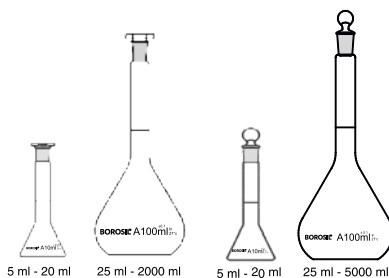
- Complies with EN ISO 1042
- Manufactured from 3.3 borosilicate USP Type I glass with an amber coating on exterior surfaces to facilitate use with light sensitive solutions
- Each flask marked with individual serial number and supplied with certificate of calibration traceable to comes with Individually certified products on request
- Specially designed wide mouth for testing bigger dia. Tablet without



Product Code		Capacity ml	Tolerance ±ml	Stopper Size	Quantity Per Case
Batch Certified	Individually Certified				
5653P05A	5653P05D	5	0.04	10 / 19	5
5653P06A	5653P06D	10	0.04	10 / 19	5
5653P08A	5653P08D	20	0.06	12 / 21	5
5653P09A	5653P09D	25*	0.06	14 / 23	5
5653T09A	5653T09D	25	0.06	12 / 21	5
5653P12A	5653P12D	50	0.1	14 / 23	10
5653P16A	5653P16D	100*	0.1	19 / 26	10
5653P20A	5653P20D	200*	0.15	19 / 26	10
5653P21A	5653P21D	250*	0.15	19 / 26	10
5653P29A	5653P29D	1000	0.6	29 / 32	10

- * Not covered in the standards
- 5 ml to 20 ml supplied with trapezoidal shape for better stability
- **Certified and Calibrated at 20°C**





5645D - VOLUMETRIC FLASKS, USP

Volumetric Flasks with Interchangeable PP Stopper Accuracy as per Class A, USP (US Pharmacopoeia), with Certificate

- Manufactured from 3.3 borosilicate, USP Type I glass
- Amber enamel inscriptions
- Dimensions as per ISO / DIN standards
- Tolerance complies to ASTM E 288 standards
- Each flask marked with serial number and supplied with certificate of calibration traceable to national standards

Product Code		Capacity ml	Tolerance ±ml	Stopper Size	Quantity Per Case
Batch Certified	Individually Certified				
5645L05A	5645L05D	5	0.02	7 / 16	5
5645L06A	5645L06D	10	0.02	7 / 16	5
5645P08A	5645P08D	20*	0.03	10 / 19	5
5645P09A	5645P09D	25	0.03	10 / 19	5
5645P12A	5645P12D	50	0.05	10 / 19	10
5645P16A	5645P16D	100	0.08	14 / 23	10
5645P20A	5645P20D	200	0.1	14 / 23	10
5645P21A	5645P21D	250	0.12	14 / 23	10
5645P24A	5645P24D	500	0.2	19 / 26	10
5645P29A	5645P29D	1000	0.3	24 / 29	10
5645P30A	5645P30D	2000	0.5	29 / 32	2

- 5 ml to 20 ml supplied with trapezoidal shape for better stability

- * Not covered in the standards

- **Certified and Calibrated at 20°C**

- Glass Stoppers on request

5645 - VOLUMETRIC FLASKS, ASTM

Volumetric Flasks with Interchangeable Solid Glass Stopper Accuracy as per Class A, USP (US Pharmacopoeia), with Certificate

- Manufactured from 3.3 borosilicate, USP Type I glass
- Complies with ASTM E 288 standards
- Each flask marked with serial number and supplied with certificate of calibration traceable to National standards

Product Code		Capacity ml	Tolerance ±ml	Stopper Size	Quantity Per Case
Batch Certified	Individually Certified				
5645S05A	5645005	5	0.02	9	5
5645S06A	5645006	10	0.02	9	5
5645S08A	5645008	20*	0.03	9	5
5645S09A	5645009	25	0.03	9	5
5645S12A	5645012	50	0.05	9	10
5645S16A	5645016	100	0.08	13	10
5645S20A	5645020	200	0.1	16	10
5645S21A	5645021	250	0.12	16	10
5645S24A	5645024	500	0.2	19	10
5645S29A	5645029	1000	0.3	22	10
5645S30A	5645030	2000	0.5	27	2

- 5 ml to 20 ml supplied with trapezoidal shape for better stability

- * Not covered in the standards

- **Certified and Calibrated at 20°C**

- Teflon Stoppers on request

5655D - VOLUMETRIC FLASKS, USP, AMBER

Volumetric Flasks with Interchangeable PP Stopper Accuracy as per Class A, USP (US Pharmacopoeia), Amber With Certificate

- Manufactured from 3.3 borosilicate, USP Type I glass
- Amber enamel inscriptions
- Dimensions as per ISO / DIN standards
- Tolerance complies to ASTM E 288 standards
- Each flask marked with serial number and supplied with certificate of calibration traceable to national standards

Product Code		Capacity ml	Tolerance ±ml	Stopper Size	Quantity Per Case
Batch Certified	Individually Certified				
5655L05A	5655L05D	5	0.02	7 / 16	5
5655L06A	5655L06D	10	0.02	7 / 16	5
5655P08A	5655P08D	20*	0.03	10 / 19	5
5655P09A	5655P09D	25	0.03	10 / 19	5
5655P12A	5655P12D	50	0.05	12 / 21	10
5655P16A	5655P16D	100	0.08	14 / 23	10
5655P20A	5655P20D	200	0.1	14 / 23	10
5655P21A	5655P21D	250	0.12	14 / 23	10
5655P24A	5655P24D	500	0.2	19 / 26	10
5655P29A	5655P29D	1000	0.3	24 / 29	10
5655P30A	5655P30D	2000	0.5	29 / 32	2

- 5 ml to 20 ml supplied with trapezoidal shape for better stability

- * Not covered in the standards

- Certified and Calibrated at 20°C

- Glass Stoppers on request



25 ml - 2000 ml 5 ml - 20 ml

5655 - VOLUMETRIC FLASKS, ASTM, AMBER

Volumetric Flasks with Interchangeable Solid Glass Stopper Accuracy as per Class A, USP (US Pharmacopoeia), Amber With Certificate

- Manufactured from 3.3 borosilicate USP Type I glass with an amber coating on exterior surfaces to facilitate use with light sensitive solutions
- Complies with ASTM E 288 standards
- Each flask marked with individual serial number and supplied with certificate of calibration traceable to National standards

Product Code		Capacity ml	Tolerance ±ml	Stopper Size	Quantity Per Case
Batch Certified	Individually Certified				
5655S05A	5655005	5	0.02	9	5
5655S06A	5655006	10	0.02	9	5
5655S08A	5655008	20*	0.03	9	5
5655S09A	5655009	25	0.03	9	5
5655S12A	5655012	50	0.05	9	10
5655S16A	5655016	100	0.08	13	10
5655S20A	5655020	200	0.11	6	10
5655S21A	5655021	250	0.12	16	10
5655S24A	5655024	500	0.2	19	10
5655S29A	5655029	1000	0.3	22	10
5655S30A	5655030	2000	0.5	27	2

- 5 ml to 20 ml supplied with trapezoidal shape for better stability

- Certified and Calibrated at 20°C

- * Not covered in standards

- For Stopper dimensions refer page no. 138

- Teflon stoppers on request





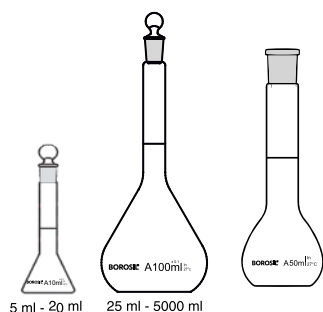
5647D - WIDE MOUTH VOLUMETRIC FLASKS, USP

Wide Mouth Volumetric Flasks with Interchangeable PP Stopper, Accuracy As Class A, USP (US Pharmacopoeia) with Certificate

- Manufactured from 3.3 borosilicate USP Type I glass
- Each flask marked with serial number and supplied with certificate of calibration traceable to National standards
- Specially designed wide mouth for testing bigger dia. Tablet without making it in powder form

Product Code		Capacity ml	Tolerance ±ml	Stopper Size	Quantity Per Case
Batch Certified	Individually Certified				
5647L05A	5647L05D	5	0.08	10 / 19	5
5647L06A	5647L06D	10	0.08	10 / 19	5
5647P08A	5647P08D	20*	0.08	12 / 21	5
5647P09A	5647P09D	25	0.08	12 / 21	5
5647P12A	5647P12D	50	0.08	14 / 23	10
5647P16A	5647P16D	100	0.1	19 / 26	10
5647P20A	5647P20D	200	0.2	19 / 26	10
5647P21A	5647P21D	250	0.2	19 / 26	10

- * Not covered in the standards
- 5 ml to 20 ml supplied with trapezoidal shape for better stability
- **Certified and Calibrated at 20°C**
- Glass Stoppers on request



5647 - WIDE MOUTH VOLUMETRIC FLASKS, ASTM

Wide Mouth Volumetric Flasks with Interchangeable Solid Glass Stopper, Accuracy As Class A, USP (US Pharmacopoeia) with Certificate

- Complies with ASTM E 288 standards
- Manufactured from 3.3 borosilicate USP Type I glass
- Each flask marked with serial number and supplied with certificate of calibration traceable to National standards
- Specially designed wide mouth for testing bigger dia. Tablet without making it in powder form

Product Code		Capacity ml	Tolerance ±ml	Stopper Size	Quantity Per Case
Batch Certified	Individually Certified				
5647S05A	5647005	5	0.08	13	5
5647S06A	5647006	10	0.08	13	5
5647S08A	5647008	20*	0.08	13	5
5647S09A	5647009	25	0.08	13	5
5647S12A	5647012	50	0.08	13	10
5647S16A	5647016	100	0.1	16	10
5647S20A	5647020	200	0.2	19	10
5647S21A	5647021	250	0.2	19	10

- 5 ml to 20 ml supplied with trapezoidal shape for better stability
- * Not covered in the standards
- **Certified and Calibrated at 20°C**
- For Stopper dimensions refer page no. 138
- Teflon Stopper on request

5657D- WIDE MOUTH VOLUMETRIC FLASKS, USP,

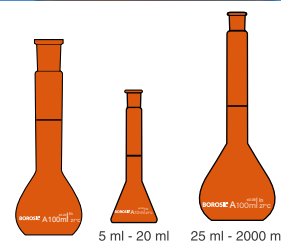
AMBER

Wide Mouth Volumetric Flasks with Interchangeable PP Stopper, Accuracy As Class A, USP Amber with Batch Certificate

- Manufactured from 3.3 borosilicate USP Type I glass
- Each flask marked with serial number and supplied with certificate of calibration traceable to National standards
- Specially designed wide mouth for testing bigger dia. Tablet without making it in powder form

Product Code		Capacity ml	Tolerance ±ml	Stopper Size	Quantity Per Case
Batch Certified	Individually Certified				
5657L05A	5657L05D	5	0.08	10 / 19	5
5657L06A	5657L06D	10	0.08	10 / 19	5
5657P08A	5657P08D	20*	0.08	12 / 21	5
5657P09A	5657P09D	25	0.08	12 / 21	5
5657P12A	5657P12D	50	0.08	14 / 23	10
5657P16A	5657P16D	100	0.1	19 / 26	10
5657P20A	5657P20D	200	0.2	19 / 26	10
5657P21A	5657P21D	250	0.2	19 / 26	10

- * Not covered in the standards
- 5 ml to 20 ml supplied with trapezoidal shape for better stability
- **Certified and Calibrated at 20°C**
- Glass Stoppers on request



5657 - WIDE MOUTH VOLUMETRIC FLASKS,

ASTM, AMBER

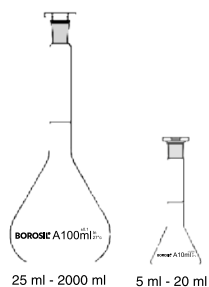
Wide Mouth Volumetric Flasks with Interchangeable Solid Glass Stopper, Accuracy As Class A, USP (US Pharmacopoeia) Amber with Certificate

- Complies with ASTM E 288 standards
- Manufactured from 3.3 borosilicate USP Type I glass
- Each flask marked with serial number and supplied with certificate of calibration traceable to National standards
- Specially designed wide mouth for testing bigger dia. Tablet without making it in powder form

Product Code		Capacity ml	Tolerance ±ml	Stopper Size	Quantity Per Case
Batch Certified	Individually Certified				
5657S05A	5657005	5	0.08	13	5
5657S06A	5657006	10	0.08	13	5
5657S08A	5657008	20*	0.08	13	5
5657S09A	5657009	25	0.08	13	5
5657S12A	5657012	50	0.08	13	10
5657S16A	5657016	100	0.1	16	10
5657S20A	5657020	200	0.2	19	10
5657S21A	5657021	250	0.2	19	10

- * Not covered in the standards
- 5 ml to 20 ml supplied with trapezoidal shape for better stability
- **Certified and Calibrated at 20°C**
- For Stopper dimensions refer page no. 138
- Teflon Stoppers on request





5642- VOLUMETRIC FLASKS

Volumetric Flasks With Interchangeable PP Stopper

Accuracy as per Class B

- Complies with EN ISO 1042
- Manufactured from 3.3 borosilicate, USP Type I glass for corrosion-free performance
- Amber enamel inscriptions

Product Code	Capacity ml	Tolerance ±ml	Stopper Size	Quantity Per Case
5642001	1*	0.05	7 / 16	10
5642002	2*	0.05	7 / 16	10
5642005	5	0.05	7 / 16	10
5642006	10	0.05	7 / 16	10
5642008	20	0.08	10 / 19	10
5642009	25	0.08	10 / 19	10
5642012	50	0.12	12 / 21	10
5642016	100	0.20	14 / 23	10
5642020	200	0.30	14 / 23	10
5642021	250	0.30	14 / 23	10
5642024	500	0.50	19 / 26	10
5642029	1000	0.80	24 / 29	10
5642030	2000	1.20	29 / 32	2
5642033	5000	2.40	34 / 35	1

- 5 ml to 20 ml supplied with trapezoidal shape for better stability

- Certified and Calibrated at 20°C



5649 - VOLUMETRIC FLASKS, AMBER

Volumetric Flasks with PP Stopper, Accuracy as per Class B, Amber

- Complies with EN ISO 1042
- Manufactured from 3.3 borosilicate USP Type I glass with an amber coating on exterior surfaces to facilitate use with light sensitive solutions
- White enamel inscriptions

Product Code	Capacity ml	Tolerance ±ml	Stopper Size	Quantity Per Case
5649P05	5	0.05	7 / 16	10
5649P06	10	0.05	7 / 16	10
5649P08	20	0.08	10 / 19	10
5649P09	25	0.08	10 / 19	10
5649P12	50	0.12	12 / 21	10
5649P16	100	0.20	14 / 23	10
5649P20	200	0.30	14 / 23	10
5649P21	250	0.30	14 / 23	10
5649P24	500	0.50	19 / 26	10
5649P29	1000	0.80	24 / 29	10
5649P30	2000	1.20	29 / 32	2

- 5 ml to 20 ml supplied with trapezoidal shape for better stability

- Certified and Calibrated at 20°C

2022 - VOLUMETRIC FLASKS, NABL

Volumetric flasks With Interchangeable PP Stopper, Accuracy as per Class A, with Certificate ISO 1042

- Manufactured from 3.3 borosilicate, USP Type I glass for corrosion-free performance

Product Code	Capacity ml	Tolerance ±ml	Stopper Size	Quantity Per Case
2022001	1	0.025	7 / 16	1
2022002	2	0.025	7 / 16	1
2022005	5	0.025	7 / 16	1
2022006	10	0.025	7 / 16	1
2022008	20	0.04	10 / 19	1
2022009	25	0.04	10 / 19	1
2022012	50	0.06	12 / 21	1
2022016	100	0.10	14 / 23	1
2022020	200	0.15	14 / 23	1
2022021	250	0.15	14 / 23	1
2022024	500	0.25	19 / 26	1
2022029	1000	0.40	24 / 29	1
2022030	2000	0.60	29 / 32	1

- * 1 ml and 2 ml size are of test tube shape
- 5 ml to 20 ml supplied with trapezoidal shape for better stability
- Certified and Calibrated at 20°C



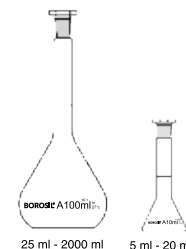
2023 - VOLUMETRIC FLASKS, NABL

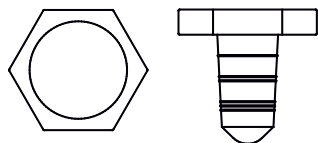
Volumetric flasks With Interchangeable PP Stopper, Accuracy as per Class A, with Certificate, ASTM E 288

- Manufactured from 3.3 borosilicate, USP Type I glass for corrosion-free performance

Product Code	Capacity ml	Tolerance ±ml	Stopper Size	Quantity Per Case
2023005	5	0.02	7 / 16	5
2023006	10	0.02	7 / 16	5
2023008	20	0.03	10 / 19	5
2023009	25	0.03	10 / 19	5
2023012	50	0.05	12 / 21	10
2023016	100	0.08	14 / 23	10
2023020	200	0.10	14 / 23	10
2023021	250	0.20	14 / 23	10
2023024	500	0.20	19 / 26	10
2023029	1000	0.30	24 / 29	10
2023030	2000	0.50	29 / 32	2

- * 1 ml and 2 ml size are of test tube shape
- 5 ml to 20 ml supplied with trapezoidal shape for better stability
- Certified and Calibrated at 20°C





8300 - PP STOPPERS

Product Code	Stopper Number	Quantity per Case
8300007	7 / 16	100
8300A10	10 / 19	100
8300012	12 / 21	100
8300A14	14 / 23	100
8300A19	19 / 26	50
8300A24	24 / 29	50
8300A29	29 / 32	50
8300A34	34 / 35	50

STOPPERS, GLASS, PLAIN

Interchangeable Ground Joint, Solid, Penny Head

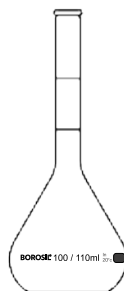
Product Code		Stopper Size	Quantity per Case
8100 PLAIN	8400 AMBER	ISO / DIN Standards	
8100A10	8400A10	10 / 19	20
8100A12	8400A12	12 / 21	20
8100A14	8400A14	14 / 23	20
8100A19	8400A19	19 / 26	20
8100A24	8400A24	24 / 29	20
8100A29	8400A29	29 / 32	20
8100A34	8400A34	34 / 35	20
8100 PLAIN	8400 AMBER	ASTM Standards	
8110008	8410008	8	20
8110009	8410009	9	20
8110013	8410013	13	20
8110016	8410016	16	20
8110019	8410019	19	20
8110022	8410022	22	20
8110027	8410027	27	20



5650 - VOLUMETRIC FLASKS

Volumetric Flasks Sugar Estimation, without Stopper

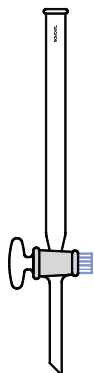
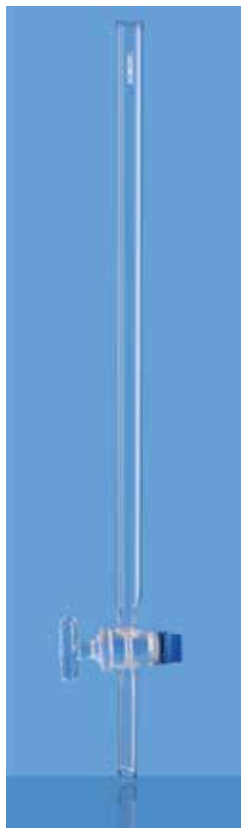
- Complies with BS 675
- A two mark flask designed for the analysis of sugar solutions. The two graduation marks provide a dilution of 1 in 10



Product Code	Capacity ml	Tolerance \pm ml	Quantity Per Case
5650016	100 / 110	0.15	20

Chromatography Columns

Column chromatography in chemistry is a method used to purify individual chemical compounds from mixtures of compounds. It is often used for preparative applications on scales from micrograms up to kilograms. The main advantage of column chromatography is the relatively low cost and disposability of the stationary phase used in the process. The latter prevents cross-contamination and stationary phase degradation due to recycling.



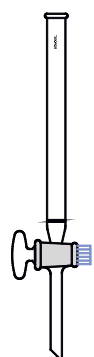
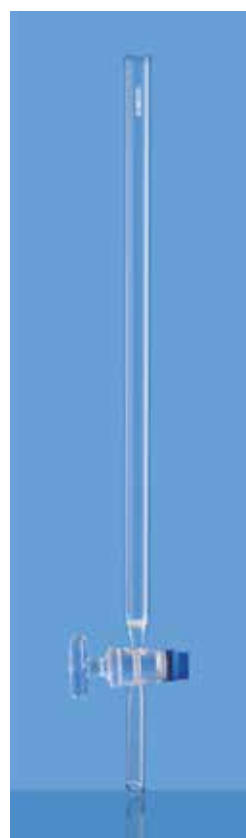
6100 - COLUMNS

Chromatography, Plain With Glass Stopcock

- Designed with straight bore stopcock that increases the life as compared to PTFE key stopcocks
- The glass stopcock enhances control and facilitates smoother action
- Generally used for purification of individual compounds from mixtures of compounds

Product Code	Approx Effective Length mm	Bore mm	Quantity Per Case
6100060	200	10	5
6100061	300	10	5
6100062	300	18	5
6100063	450	30	5
6100064	500	10	5
6100065	500	18	5
6100066	600	30	5
6100067	600	40	5
6100068	1000	40	4

Note : The Columns with Boroflow & PTFE stopcock will be made available on request



6101 - COLUMNS

Chromatography, Plain With Sintered Disc And Glass Stopcock

- Designed with straight bore stopcock that increases the life as compared to PTFE key stopcocks
- The glass stopcock enhances control and facilitates smoother action.
- Columns are added with a Sintered Disc for good results.
- Generally used for purification of individual compounds from mixtures of compounds
- Columns are added with a sintered disk (Grade I) for good result

Product Code	Approx Effective Length mm	Bore mm	Quantity Per Case
6101060	200	10	5
6101061	300	10	5
6101062	300	18	5
6101063	450	30	5
6101064	500	10	5
6101065	500	18	5
6101066	600	30	5
6101067	600	45	5
6101068	1000	45	4

Note : The Columns with Boroflow & PTFE stopcock will be made available on request

BOROSIL®

QR CODED GLASSWARE

A smart way to access
calibration data through LIMS



**LIMS compatible
Quick Response
(QR) Code**

BOROSIL® A100 ± 0.1
ml

Proudly Made in India Since 1962

Funnels

Funnels may be used for separating solids from liquids, liquids from liquids and occasionally, for pouring something into a container.

BOROSIL® brand Funnels are available in a comprehensive range for a variety of such applications. Sintered Glass Funnels are also available.

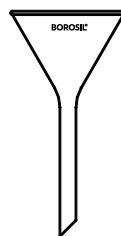
Separating Funnels come in globe, pear and cylindrical shapes with ground glass stopcocks and interchangeable stoppers. These Funnels are made of specially moulded blanks. Stopcock bores, body openings and stems are carefully aligned to facilitate the smooth and even flow of liquid with fast cut-off.



6140 - FUNNELS

Plain, 60° Angle, Short Stem

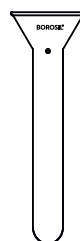
- Complies with IS 1591, DIN / ISO 4798
- Made 3.3 borosilicate glass, USP Type I
- Designed with a 60° bowl angle to ensure precise fitting of the filter paper
- High thermal shock resistance and chemical resistance
- Generally used for filtering and decanting liquids of varied densities



Product Code	Diameter mm	Stem		Quantity Per Case
		OD	Length	
6140057	25	6	25	30
6140058	35	6	35	30
6140065	50	8	50	20
6140069	65	8	65	20
6140071	75	8	75	20
6140077	100	10	100	40

6150 - TUBES FUNNEL TEST TUBES

- Specially Designed for Soil testing laboratory

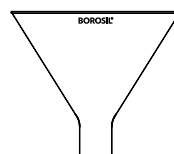


Product Code	Capacity ml	Quantity Per Case
6150007	15	10
6150010	30	10

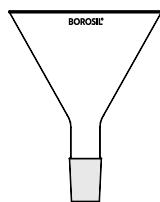
• Volumetric Flasks
 • Funnels
 • Gas Generator
 • Jars & Kettles

6220 - FUNNELS, POWDER

- Ideal for transferring powders
- Designed with a short wide stem to facilitate smooth flow
- Made of chemically resistant 3.3 borosilicate glass



Product Code	Capacity ml	Quantity Per Case
6220080	125	30
6220081	150	20
6220087	200	4
6220089	250	4

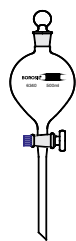


6230 - FUNNELS

Powder, Stem, with Cone

- Ideal for transferring powders
- Designed with a short wide stem to facilitate smooth flow
- Made of chemically resistant 3.3 borosilicate glass
- Supplied with ground glass cone for easy fitting on flask
- Joint size 24 / 29 for all capacities

Product Code	Capacity ml	Quantity Per Case
6230080	125	20
6230081	150	20
6230087	200	4
6230089	250	4



6340-FUNNELS

Separating, Globe Shape, with Stopcock and Inter- changeable Stopper

- Made from 3.3 borosilicate glass, USP Type I
- Equipped with a standard ground glass stopcock
- Globe shape, with a stem
- Generally used in the separation phase

Product Code	Capacity ml	Stopper Size	Quantity Per Case
6340017	125	19 / 26	10
6340021	250	24 / 29	10
6340024	500	24 / 29	10
6340029	1000	29 / 32	5
6340030	2000	29 / 32	10
6340033	5000	34 / 35	1



6400-FUNNELS

Separating, Pear Shape, with glass Stopcock and interchangeable Stopper

- Complies with IS 1575, DIN / ISO 4800
- Made 3.3 borosilicate glass, USP Type I
- Equipped with a standard glass stopcock
- Pear shape, with a stem
- Generally used in the separation phase

Product Code	Capacity ml	Stopper Size	Quantity Per Case
6400013	60*	14 / 23	10
6400017	125*	19 / 26	10
6400021	250	24 / 29	10
6400024	500	24 / 29	10
6400029	1000	29 / 32	10
6400030	2000	29 / 32	10

* Not covered in standards.

6402-FUNNELS

Separating, Pear Shape, Fitted with Boroflo Stopcock with PTFE Key and Interchangeable Stopper

- Complies with IS 1575, DIN / ISO 4800
- Made 3.3 borosilicate glass, USP Type I
- Equipped with a Boroflo stopcock with PTFE key
- Pear shape, with a stem
- Generally used in the separation phase



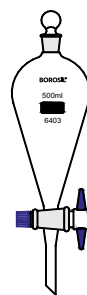
Product Code	Capacity ml	Stopper Size	Quantity Per Case
6402013	60*	14 / 23	10
6402017	125*	19 / 26	10
6402021	250	24 / 29	10
6402024	500	24 / 29	10
6402029	1000	29 / 32	10
6402030	2000	29 / 32	10

* Not covered in standards.

6403-FUNNELS

Separating, Pear Shape, with PTFE Key Stopcock, Interchangeable Stopper

- Complies with IS 1575, DIN / ISO 4800
- Made of 3.3 borosilicate glass
- USP Type I glass
- Equipped with a PTFE key stopcock
- Pear shape, with a stem
- Generally used in the separation phase



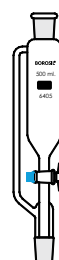
Product Code	Capacity ml	Stopper Size	Quantity Per Case
6403017	125*	19 / 26	10
6403021	250	24 / 29	10
6403024	500	24 / 29	10
6403029	1000	29 / 32	10
6403030	2000	29 / 32	10

* Not covered in standards.

6405 - FUNNEL

Pressure Equilising Cylindrical, with PTFE Stopcock

- Made 3.3 borosilicate glass, USP Type I
- Equipped with totally grease free and self lubricating PTFE stopcock
- Supplied with polypropylene stopper



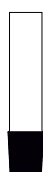
Product Code	Capacity ml	Socket	Cone	Quantity Per Case
6405012	50	19 / 26	19 / 26	5
6405016	100	19 / 26	19 / 26	5
6405021	250	24 / 29	24 / 29	5
6405024	500	24 / 29	24 / 29	5



6408 - DROPPING FUNNEL WITH GLASS STOPCOCK

- Complies with IS 1575, DIN / ISO 4800

Product Code	Capacity ml	Neck Joint	Quantity Per Case
6408012	50	14 / 23	5
6408016	100	19 / 26	5
6408021	250	24 / 29	5
6408024	500	24 / 29	5
6408029	1000	29 / 32	5

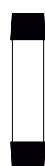


6560 - CONE Plain Shank, Single

- Made from 3.3 borosilicate glass, USP Type I
- Complies to DIN 12249
- These joints are made with precision grinding

Product Code	Cone Joint Size	Total Length	Quantity Per Case
6560010	10 / 19	120	5
6560012	12 / 21	120	5
6560014	14 / 23	120	5
6560019	19 / 26	125	5
6560024	24 / 29	135	5
6560029	29 / 32	135	5
6560034	34 / 35	150	5
6560040	40 / 38*	150	5
6560045	45 / 40*	150	5
6560050	50 / 42*	150	5
6560055	55 / 44	150	5

* Not covered in standard



6561- CONE Plain Shank, Double

- Made from 3.3 borosilicate glass, USP Type I
- Complies to DIN 12249
- These joints are made with precision grinding

Product Code	Cone Joint Size	Total Length	Quantity Per Case
6561010	10 / 19	125	5
6561012	12 / 21	135	5
6561014	14 / 23	135	5
6561019	19 / 26	140	5
6561024	24 / 29	170	5
6561029	29 / 32	170	5
6561034	34 / 35	180	5
6561040	40 / 38	185	5

6580 - SOCKETS

Plain Shank, Single

- Made from 3.3 borosilicate glass, USP Type I
- Complies to DIN 12249
- These joints are made with precision grinding



Product Code	Cone Joint Size	Total Length	Quantity Per Case
6580010	10 / 19	120	5
6580012	12 / 21	120	5
6580014	14 / 23	120	5
6580019	19 / 26	125	5
6580024	24 / 29	135	5
6580029	29 / 32	135	5
6580034	34 / 35	150	5
6580040	40 / 38	150	5
6580045	45 / 40	150	5
6580050	50 / 42	150	5
6580055	55 / 44	150	5



6581 - SOCKETS

Plain Shank, Double

- Made from 3.3 borosilicate glass, USP Type I
- Complies to DIN 12249
- These joints are made with precision grinding



Product Code	Cone Joint Size	Total Length	Quantity Per Case
6581010	10 / 19	125	5
6581012	12 / 21	135	5
6581014	14 / 23	135	5
6581019	19 / 26	140	5
6581024	24 / 29	170	5
6581029	29 / 32	170	5
6581034	34 / 35	180	5
6581040	40 / 38	185	5

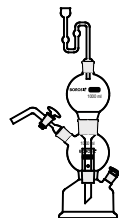




GAS GENERATOR

Any scientific lab is incomplete without Gas Generator, an instrument that supports a multitude of scientific experiments across institutions and industries. It is a rapid, inexpensive and effective apparatus to produce controllable amounts of common gases such as hydrogen sulphide, carbon dioxide etc.

BOROSIL® Gas Generator is an ideal choice with the promise of high quality and precision, thus making it the perfect solution for scientific purposes.



6550 - GAS GENERATOR Kipps

- Manufactured from 3.3 Borosilicate glass USP Type I
- Used to produce common gases
- Simple to operate and quickly charged as well as assembled

Product Code	Capacity ml	Quantity Per Case
6550024	500	1
6550029	1000	1

* Spares available on request

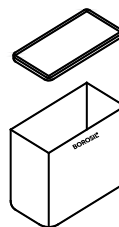


JARS

The cover of Museum Jar is provided with a small orifice for easy filling of the preservative without unsealing the lid. The excellent resistance to chemical attack and good optical clarity of Borosil® brand jars gives them a clear advantage over others.

6910 - Jars

Rectangular, Museum, with Cover, 3.3 Borosilicate glass



- Made from borosilicate glass 3.3 USP Type I
- Specially blown to give sturdiness and long life
- Top edges are flat ground
- Not recommended for use over a direct flame or on a hot plate
- Covers are made from Soda glass

Product Code	Approx Height x Length x Breadth mm	Quantity Per Case
6910M41	200 x 125 x 125	1
6910M42	200 x 150 x 100	1
6910M43	220 x 195 x 80	1
6910M44	250 x 165 x 140	1
6910M45	250 x 250 x 120	1
6910M46	360 x 150 x 100	1

KETTLES

Borosil brand Resin Reaction Kettles are designed for organic reactions involving viscous materials. The wide mouth enables easy access for cleaning the interior. The covers are of heavy construction, while the lower sections are mould-blown to ensure maximum resistance to mechanical breakage. The covers have openings with interchangeable joints to facilitate rapid assembly with Condensers, Stirrers, etc. Flanges of the covers and base are finely ground to ensure a tight seal.

6947 - KETTLES Resin Reaction

- Made of 3.3 Borosilicate glass
- Designed for viscous reaction materials
- The wide mouth enables easy access for cleaning the interior
- Flanges of the covers and base are finely ground to ensure a tight seal
- Equipped with interchangeable covers with four openings



Product Code	Capacity ml	Body Dia mm	Height mm	Quantity Per Case Set
6947024	500	100	150	1
6947029	1000	110	175	1
6947030	2000	150	185	1
6947032	4000	150	340	1

The 500 ml and 1000 ml kettles have interchangeable covers with four openings to accommodate 24 / 29 interchangeable joints. Kettles of 2000 ml and 4000 ml capacity have interchangeable covers with openings to accommodate three 24 / 29 interchangeable joints and one 34 / 35 interchangeable joint.

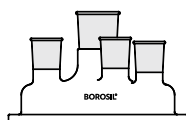


6948 - Bottoms

Only for Kettles Cat no. 6947

- Made of 3.3 borosilicate glass to ensure maximum resistance to mechanical breakage
- The base has a wide mouth that enables easy access for cleaning the interior
- Flanges of the base are finely ground to ensure a tight seal

Product Code	Capacity ml	Quantity Per Case
6948024	500	2
6948029	1000	2
6948030	2000	2
6948032	4000	2



6949 - Covers

Only for Kettles Cat No. 6947

- Made of 3.3 borosilicate glass, and made of heavy construction
- The covers have openings with interchangeable joints to facilitate rapid assembly with
- Condensers and Stirrers
- Flanges of the covers are finely ground to ensure a tight seal

Product Code	Capacity ml	Quantity Per Case
6949041	500 / 1000	2
6949042	2000 / 4000	2

The 500 ml and 1000 ml kettles have interchangeable covers with four openings to accommodate 24 / 29 interchangeable joints. Kettles of 2000 ml and 4000 ml capacity have interchangeable covers with openings to accommodate three 24 / 29 interchangeable joints and one 34 / 35 interchangeable joint.

BOROSIL®

FLASKS

- Conforms to IS 1381 (Part I & Part II)
- Mechanically strong
- Uniform Wall Thickness
- Ideal for heating applications
- Shape suitable for mixing liquid
- Available in Wide neck / Screw Cap and Amber colour
- Ideal for culture work



Proudly Made in India Since 1962

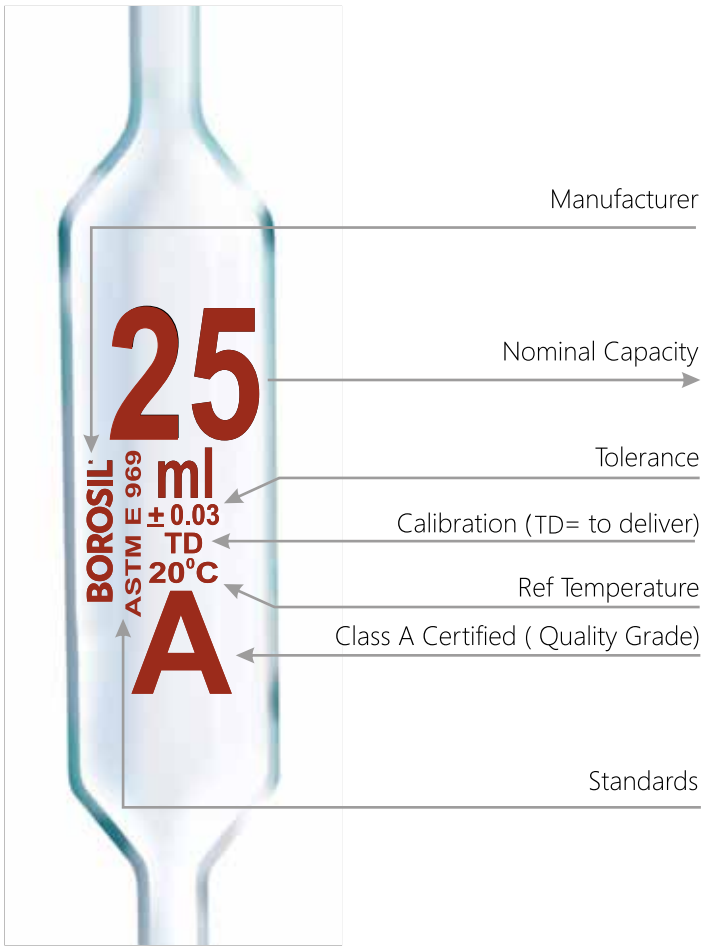
Pipettes

BOROSIL[®] brand Pipettes are made of specially-selected heavy wall machine-drawn borosilicate accurate bore glass tubing. They have precision formed jets, and bevel ground ends that resist chipping. The graduation marks are made in durable white enamel or amber stain, resistant to normal laboratory reagents and repeated washing. All the Pipettes are individually measured, and then marked. The uniformity of bore ensures accuracy between any two readings. The Pipettes can be autoclaved and, if necessary, can be flamed for sterilisation.

All **Borosil** Pipettes are colour-coded at the top in accordance with ISO Standards, to facilitate easy identification. The graduation marks are screen printed. The mouth piece of Pipettes of 5 ml and above are tooled with uniform OD for easy sucking. Such tooling also imparts additional strength.

Borosil brand Pipettes are truly dependable in terms of their accuracy. They are available in both, Class A with Works Certificate as well as Class B tolerances.





Tips are carefully tooled and ensure proper flow rates

Tip edges are fire polished



All pipettes are colour coded at the top to allow fast identification



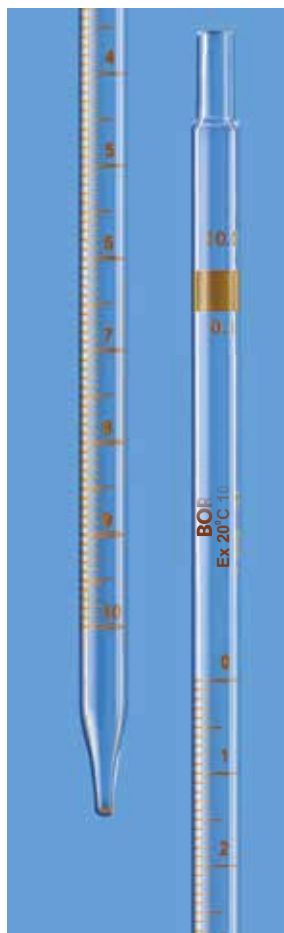
Mohr Type
Delivery from zero mark to the last graduation mark



Serological Type
Delivery from zero mark to the tip

Two Rings

Two rings at the top indicate that these pipettes are calibrated to deliver their total capacity

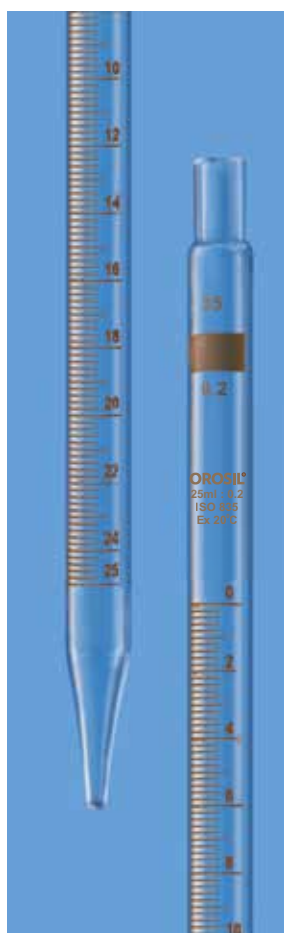


7059 - PIPETTES

Measuring (Mohr Type), Class A, with Certificate

- Complies with IS, EN ISO 835
- These Pipettes are graduated for delivery from zero mark to the last graduation mark
- Sturdy, designed to last long
- Markings are made in permanent amber stain diffused into the surface of the glass for better visibility and durability
- Supplied with calibration certificate showing actual volume dispensed and providing traceability to national standards

Product Code		Capacity ml ml	Graduation Interval	Tolerance ±ml	Quantity per Case
Batch Certified	Individually Certified				
7059P41A	7059P41D	0.1	0.01	0.006	10
7059P42A	7059P41D	0.2	0.01	0.006	10
7059P01A	7059P41D	1	0.01	0.007	10
7059P11A	7059P41D	1	0.10	0.007	10
7059P02A	7059P41D	2	0.02	0.01	10
7059P22A	7059P41D	2	0.10	0.01	10
7059P05A	7059P41D	5	0.05	0.03	10
7059P55A	7059P41D	5	0.10	0.03	10
7059P06A	7059P41D	10	0.10	0.05	10
7059P09A	7059P41D	25	0.20	0.10	10



7060 - PIPETTES

Measuring (Mohr Type), Class B

- Complies to IS, EN ISO 835
- These Pipettes are graduated for delivery from zero mark to the last graduation mark
- Sturdy, designed to last long
- Markings are made in permanent amber stain diffused into the surface of the glass for better visibility and durability

Product Code	Capacity ml	Graduation Interval ml	Tolerance ±ml	Quantity per Case
7060P41D	0.1	0.01	0.01	20
7060P42D	0.2	0.01	0.01	20
7060P01D	1	0.01	0.01	20
7060P11D	1	0.10	0.01	20
7060P02D	2	0.02	0.02	20
7060P22D	2	0.10	0.02	20
7060P05D	5	0.05	0.05	20
7060P55D	5	0.10	0.05	20
7060P06D	10	0.10	0.10	20
7060P09D	25	0.20	0.20	20

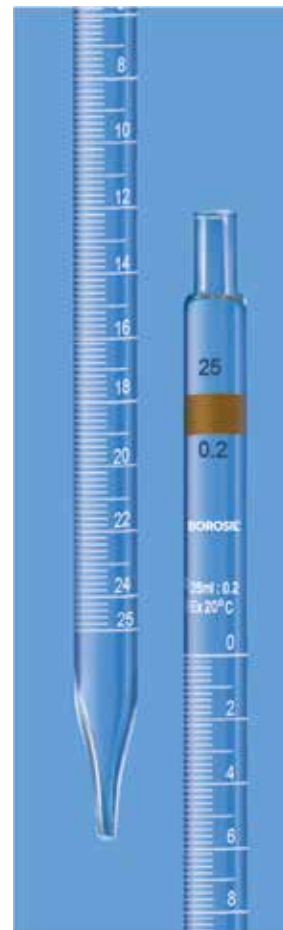
7062 - PIPETTES

Measuring (Mohr Type), Class B, White Marking

- Complies with EN ISO 835
- These Pipettes are graduated for delivery from zero mark to the last graduation mark
- Sturdy, designed to last long



Product Code	Capacity ml	Graduation Interval ml	Tolerance \pm ml	Quantity per Case
7062P41D	0.1	0.01	0.01	20
7062P42D	0.2	0.01	0.01	20
7062P01D	1	0.01	0.01	20
7062P11D	1	0.10	0.01	20
7062P02D	2	0.02	0.02	20
7062P22D	2	0.10	0.02	20
7062P05D	5	0.05	0.05	20
7062P55D	5	0.10	0.05	20
7062P06D	10	0.10	0.10	20
7062P09D	25	0.20	0.20	20



NABL
CERTIFIED

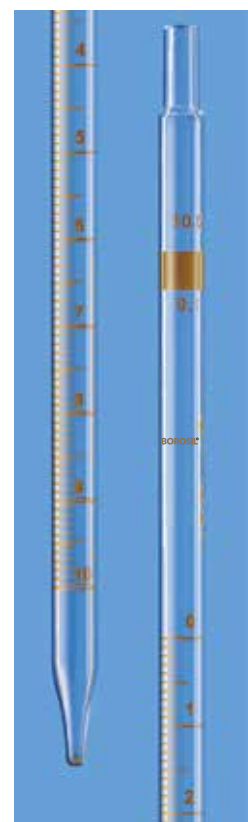
2031 - PIPETTES

Measuring (Mohr Type), Accuracy as per Class A, with Certificate, ISO 835, NABL Certified

- Complies with IS, EN ISO 835
- These Pipettes are graduated for delivery from zero mark to the last graduation mark
- Sturdy, designed to last long
- Markings are made in permanent amber stain diffused into the surface of the glass for better visibility and durability
- Supplied with individual NABL calibration certificate showing actual volume dispensed and providing traceability to national standards



Product Code	Capacity ml	Graduation Interval ml	Tolerance \pm ml	Quantity per Case
2031P01	1	0.01	0.007	10
2031P02	2	0.02	0.01	10
2031P05	5	0.05	0.03	10
2031P06	10	0.1	0.05	10
2031P09	25	0.2	0.1	10
2031P11	1	0.1	0.007	10
2031P22	2	0.1	0.1	10
2031P41	0.1	0.01	0.06	10
2031P42	0.2	0.01	0.006	10
2031P55	5	0.1	0.03	10



Pipettes



7079 - PIPETTES Serological, Class A, with Certificate

- Complies with IS, EN ISO 835
- These Pipettes are graduated to the tip
- Two rings at the top indicate that the Pipette is calibrated to deliver from any graduation line down to tip
- Markings are made in permanent amber stain diffused into the surface of the glass for better visibility and durability

Product Code		Capacity ml	Graduation Interval ml	Tolerance ±ml	Quantity per Case
Batch Certified	Individually Certified				
7079P41A	7079P41D	0.1	0.01	0.006	10
7079P42A	7079P41D	0.2	0.01	0.006	10
7079P01A	7079P41D	1	0.01	0.007	10
7079P11A	7079P41D	1	0.10	0.007	10
7079P02A	7079P41D	2	0.02	0.01	10
7079P22A	7079P41D	2	0.10	0.01	10
7079P05A	7079P41D	5	0.05	0.03	10
7079P55A	7079P41D	5	0.10	0.03	10
7079P06A	7079P41D	10	0.10	0.05	10
7079P09A	7079P41D	25	0.20	0.10	10



7080 - PIPETTES Serological Class B

- Complies with IS, EN ISO 835
- These Pipettes are graduated to the tip
- Two rings at the top indicate that the Pipette is calibrated to deliver from any graduation line down to tip
- Markings are made in permanent amber stain diffused into the surface of the glass for better visibility and durability

Product Code	Capacity ml	Graduation Interval ml	Tolerance ±ml	Quantity per Case
7080P41D	0.1	0.01	0.01	20
7080P42D	0.2	0.01	0.01	20
7080P01D	1	0.01	0.01	20
7080P11D	1	0.10	0.01	20
7080P02D	2	0.02	0.02	20
7080P22D	2	0.10	0.02	20
7080P05D	5	0.05	0.05	20
7080P55D	5	0.10	0.05	20
7080P06D	10	0.10	0.10	20
7080P09D	25	0.20	0.20	20

7081 - PIPETTES

Serological, Class A Accuracy as per USP with certificate

- Complies with ASTM 1293 - 02
- These Pipettes are graduated for delivery from zero mark to the last graduation mark
- Sturdy, designed to last long
- Markings are made in permanent amber stain diffused into the surface of the glass for better visibility and durability
- Supplied with calibration certificate showing actual volume dispensed and providing traceability to national standards



Product Code		Capacity ml	Graduation Interval ml	Tolerance \pm ml	Quantity per Case
Batch Certified	Individually Certified				
7081P01A	7081P01	1	0.01	0.01	10
7081P11A	7081P11	1	0.1	0.01	10
7081P22A	7081P22	2	0.1	0.01	10
7081P55A	7081P55	5	0.1	0.02	10
7081P06A	7081P06	10	0.1	0.03	10
7081P09A	7081P09	25	0.1	0.05	10



7082 - PIPETTES

Serological, (White Marking), Class B

- Complies with IS, EN ISO 835
- These Pipettes are graduated to the tip
- Two rings at the top indicate that the Pipette is calibrated to deliver from any graduation line down to tip
- Graduation in white enamel increases the visibility with dark solution



Product Code	Capacity ml	Graduation Interval ml	Tolerance \pm ml	Quantity per Case
7082P41D	0.1	0.01	0.01	20
7082P42D	0.2	0.01	0.01	20
7082P01D	1	0.01	0.01	20
7082P11D	1	0.10	0.01	20
7082P02D	2	0.02	0.02	20
7082P22D	2	0.10	0.02	20
7082P05D	5	0.05	0.05	20
7082P55D	5	0.10	0.05	20
7082P06D	10	0.10	0.10	20
7082P09D	25	0.20	0.20	20



Pipettes



**NABL
CERTIFIED**

2032 - Pipettes, Measuring (Serological Type), Accuracy as per Class A, with Certificate, ASTM 1293-02, NABL Certified

Product Code	Capacity ml	Graduation Interval ml	Tolerance \pm ml	Quantity per Case
2032P01	1	0.01	0.01	10
2032P06	10	0.1	0.3	10
2032P09	25	0.1	0.5	10
2032P011	1	0.1	0.01	10
2032P022	2	0.1	0.01	10
2032P055	5	0.1	0.02	10



Pipettes



7100 - PIPETTES

Transfer, Volumetric, Class A Accuracy, with Certificate

- Complies with EN ISO 648
- Calibrated for delivery (TD, Ex)
- Generally used for accurate measurement and decanting of liquid
- Each pipette coded with unique no. supplied with calibration certificate giving exact volume with traceability to national standards



Product Code		Capacity ml	Tolerance \pm ml	Quantity per Case
Batch Certified	Individually Certified			
7100001A	7100001D	1	0.008	10
7100002A	7100002D	2	0.010	10
7100005A	7100005D	5	0.015	10
7100006A	7100006D	10	0.02	10
7100008A	7100008D	20	0.03	10
7100009A	7100009D	25	0.03	10
7100012A	7100012D	50	0.05	10
7100016A	7100016D	100	0.08	10

7101 - PIPETTES

Transfer, Volumetric, Class A, Accuracy as per USP with Certificate

- Complies with ASTM E-969-02
- Calibrated for delivery (TD, Ex)
- Generally used for accurate measurement and decanting of liquid
- Each pipette coded with unique no. supplied with calibration certificate giving exact volume with traceability to national standards



Product Code		Capacity ml	Tolerance ± ml	Quantity per Case
Batch Certified	Individually Certified			
7101001A	7101001	1	0.006	10
7101105A	7101105	1.5*	0.006	10
7101002A	7101002	2	0.006	10
7101205A	7101205	2.5*	0.01	10
7101003A	7101003	3	0.01	10
7101004A	7101004	4	0.01	10
7101005A	7101005	5	0.01	10
7101706A	7101706	6	0.01	10
7101707A	7101707	7	0.01	10
7101708A	7101708	8	0.02	10
7101709A	7101709	9	0.02	10
7101006A	7101006	10	0.02	10
7101007A	7101007	15	0.03	10
7101008A	7101008	20	0.03	10
7101009A	7101009	25	0.03	10
7101010A	7101010	30	0.03	10
7101011A	7101011	40	0.05	10
7101012A	7101012	50	0.05	10
7101016A	7101016	100	0.08	10

-*Not covered in standards



2041 - Pipettes, Transfer, Volumetric, Class A, ASTM E-969-02, NABL Certified

Product Code	Capacity ml	Tolerance ± ml	Quantity per Case
2041001	1	0.006	10
2041002	2	0.006	10
2041003	3	0.01	10
2041004	4	0.01	10
2041005	5	0.01	10
2041006	6	0.01	10
2041007	7	0.01	10
2041008	8	0.02	10
2041009	9	0.02	10
2041006	10	0.02	10
2041007	15	0.03	10
2041008	20	0.03	10
2041011	40	0.05	10
2041012	50	0.058	10



Pipettes



7102 - PIPETTES

Transfer, Volumetric, Class B

- Complies with EN ISO 648
- Calibrated for delivery
- Generally used for accurate measurement and decanting of liquid

Product Code	Capacity ml	Tolerance \pm ml	Quantity per Case
7102001D	1	0.015	10
7102002D	2	0.02	10
7102005D	5	0.03	10
7102006D	10	0.04	10
7102008D	20	0.06	10
7102009D	25	0.06	10
7102012D	50	0.10	10
7102016D	100	0.15	10



7103 - PIPETTES

Transfer, Volumetric, Class B

- Complies with ASTM E-969-02
- Calibrated for delivery
- Generally used for accurate measurement and decanting of liquid

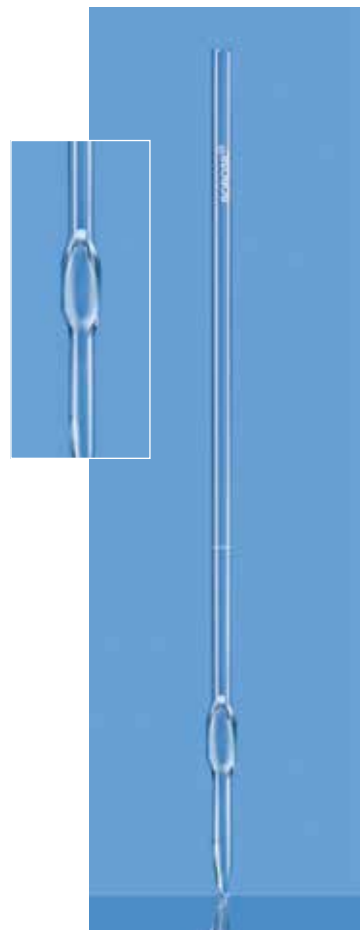
Product Code	Capacity ml	Tolerance \pm ml	Quantity per Case
7103001	1	0.012	10
7103002	2	0.012	10
7103003	3	0.02	10
7103004	4	0.02	10
7103005	5	0.02	10
7103706	6	0.03	10
7103707	7	0.03	10
7103708	8	0.04	10
7103709	9	0.04	10
7103006	10	0.04	10
7103007	15	0.06	10
7103008	20	0.06	10
7103009	25	0.06	10
7103010	30*	0.06	10
7103011	40*	0.10	10
7103012	50	0.10	10
7103016	100	0.16	10

* Not covered in ASTM standards

7105 - PIPETTE

Ostwald - Folin

- Complies with IS 5155 : 2009



Product Code	Capacity ml	Quantity per Case
7105P45	0.5	10
7105001	1	10

These pipettes are generally used for blood serum tests. They are calibrated to deliver by blowing out the last drop.

7106 - PIPETTES

Transfer, Volumetric, Class A, Accuracy as per USP, Amber

- Complies with ASTM E-969-02
- Calibrated for delivery (TD, Ex)
- Generally used for accurate measurement and decanting of liquid
- Each pipette coded with unique no. supplied with calibration certificate giving exact volume with traceability to national standards



Pipettes

Product Code		Capacity ml	Tolerance \pm ml	Quantity per Case
Batch Certified	Individually Certified			
7106001A	7106001	1	0.006	10
7106002A	7106002	2	0.006	10
7106005A	7106005	5	0.010	10
7106006A	7106006	10	0.02	10
7106008A	7106008	20	0.03	10
7106009A	7106009	25	0.03	10
7106012A	7106012	50	0.05	10
7106016A	7106016	100	0.08	10

PIPETTES

CLASS AS

Swift Delivery Pipettes

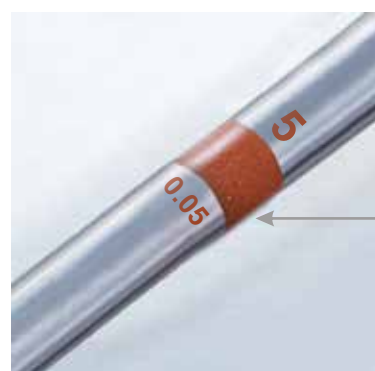
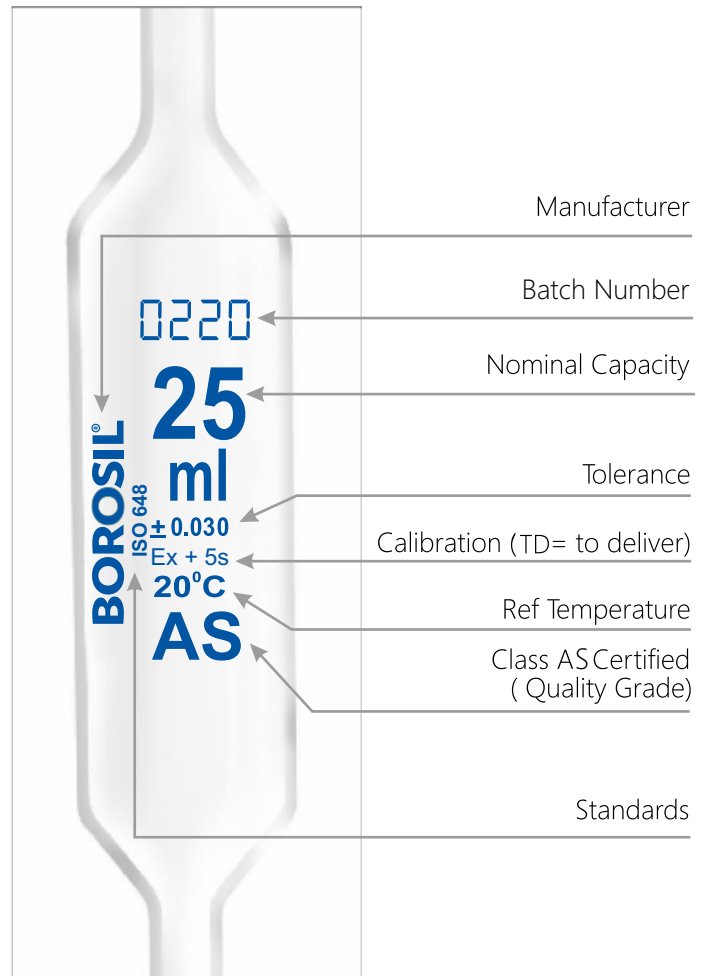
For liquid measurements and decanting applications

Choose the type of pipette that suits your application

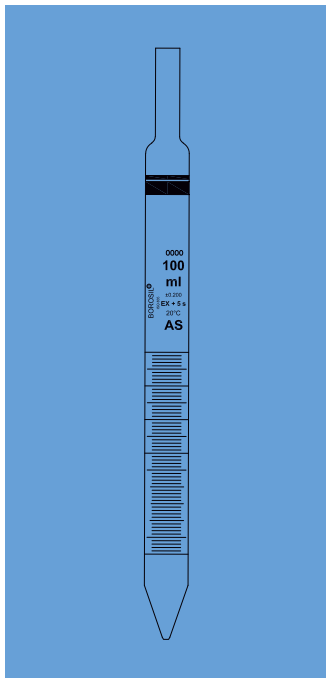
- Serological Pipettes
- Mohr -Type Pipettes
- Volumetric Pipettes – One mark and two marks



- Pipettes made of soda-lime glass
- Manufactured according to ISO 648 and DIN 12687 (for volumetric pipettes) and ISO 835 and DIN 12699 (for graduated pipettes)
- Class **AS** (swift delivery) pipettes with tolerances according to ISO/DIN standards; waiting time 5secs
- Calibrated at 20°C; Batch certificate available
- Colour coded for easy identification of volumes
- Finely tooled tip and mouth piece offers convenience while aspiration and release of liquid
- Specially heat-treated tips to avoid breakage/chipping of tips
- Permanent graduation marks in blue colour for clear visibility
- Available in three types - Serological pipettes, Mohr type graduated pipettes, Volumetric pipettes (one mark and two marks)



Pipettes

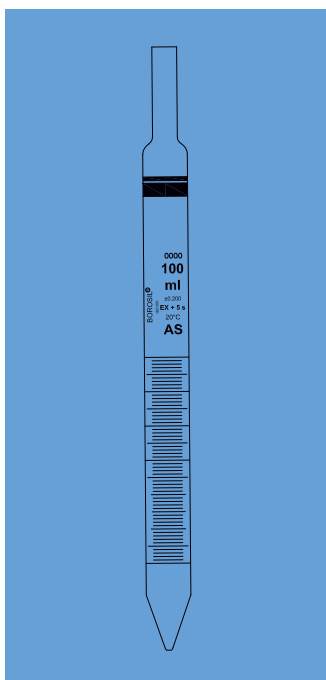


7070 - PIPETTES AS

Serological pipette, Graduated, Class AS, ISO 835

Product Code	Capacity ml	Graduation Interval ml	Tolerance \pm ml	QTY per Case	Colour	No. of Bands
7070P41A	0.1	0.01	0.006	10	White	1
7070P42A	0.2	0.01	0.006	10	Black	1
7070P45A	0.5	0.01	0.006	10	Yellow	2
7070001A	1	0.01	0.007	10	Yellow	1
7070002A	2	0.02	0.010	10	Black	1
7070005A	5	0.05	0.030	10	Red	1
7070006A	10	0.1	0.050	10	Orange	1
7070008A	20	0.1	0.100	10	Yellow	2
7070009A	25	0.1	0.100	10	White	1
7070012A	50*	0.2	0.200	10	Black	1
7070016A	100*	0.2	0.200	5	Red	1

* Not as per ISO standard



7072 - PIPETTES AS

Mohr pipette, Graduated, Class AS, ISO 835

Product Code	Capacity ml	Graduation Interval ml	Tolerance \pm ml	QTY per Case	Colour	No. of Bands
7072P41A	0.1	0.01	0.006	10	White	1
7072P42A	0.2	0.01	0.006	10	Black	1
7072P45A	0.5	0.01	0.006	10	Yellow	2
7072001A	1	0.01	0.007	10	Yellow	1
7072002A	2	0.02	0.010	10	Black	1
7072005A	5	0.05	0.030	10	Red	1
7072006A	10	0.1	0.050	10	Orange	1
7072008A	20*	0.1	0.100	10	Yellow	2
7072009A	25	0.1	0.100	10	White	1
7072012A	50*	0.2	0.200	10	Black	1
7072016A	100*	0.2	0.200	5	Red	1

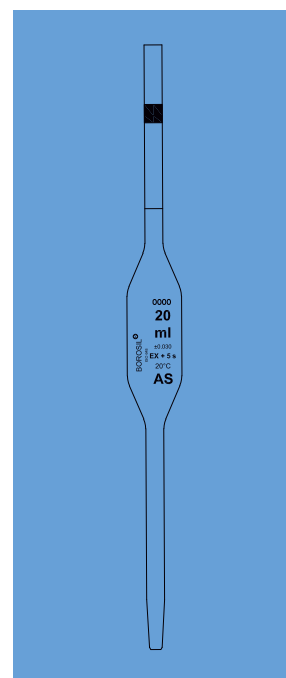
* Not as per ISO standard

7110 - PIPETTES AS

Volumetric Pipette, One Mark, Enlarged Form,
Class AS, ISO 648

Product Code	Capacity ml	Tolerance \pm ml	Quantity per Case	Colours	No. of Bands
7110001A	1	0.008	10	Blue	1
7110002A	2	0.010	10	Orange	1
7110003A	3*	0.010	10	Black	1
7110004A	4*	0.015	10	Red	1
7110005A	5	0.015	10	White	1
7110706A	6*	0.015	10	Orange	2
7110707A	7*	0.020	10	Green	1
7110708A	8*	0.020	10	Blue	1
7110709A	9*	0.020	10	Black	1
7110006A	10	0.020	10	Red	1
7110007A	15*	0.030	10	Green	1
7110008A	20	0.030	10	Yellow	1
7110009A	25	0.030	10	Blue	1
7110012A	50	0.050	10	Red	1
7110016A	100	0.080	10	Yellow	1

* Not as per ISO standard

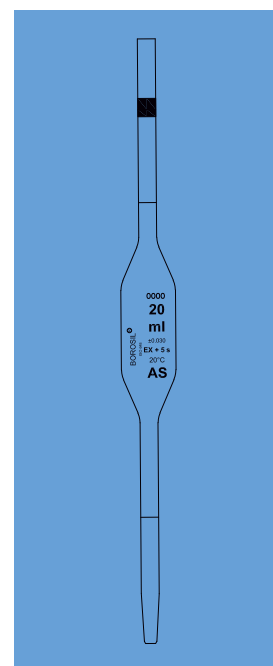


7112 - PIPETTES AS

Volumetric Pipette, Two Mark, Enlarged Form,
Class AS, ISO 648

Product Code	Capacity ml	Tolerance \pm ml	Quantity per Case	Colours	No. of Bands
7112001A	1	0.008	10	Blue	1
7112002A	2	0.010	10	Orange	1
7112003A	3*	0.010	10	Black	1
7112004A	4*	0.015	10	Red	2
7112005A	5	0.015	10	White	1
7112706A	6*	0.015	10	Orange	2
7112707A	7*	0.020	10	Green	2
7112708A	8*	0.020	10	Blue	1
7112709A	9*	0.020	10	Black	1
7112006A	10	0.020	10	Red	1
7112007A	15*	0.030	10	Green	1
7112008A	20	0.030	10	Yellow	1
7112009A	25	0.030	10	Blue	1
7112012A	50	0.050	10	Red	1
7112016A	100	0.080	10	Yellow	1

* Not as per ISO standard



Weighing Scoop

Borosil Weighing Scoops are primarily used when small quantities of powder, liquid or semi-solid material need to be weighed. The powder can be introduced into the receiving vessel through the tubular stem.



7200 – WEIGHING SCOOP

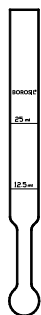
- Weighing Scoops have an open tubular arm.
- Ideal for weighing small quantities of dyes and powders

	Product Code	Capacity ml	Quantity per Case
new	7200P45	0.5	10
	7200001	1	10
	7200002	2	10
	7200003	3	10
	7200076	6	10
	7200006	10	10

Tubes

Based on your needs, we offer an assortment of centrifuge tubes, Folin-Wu Tubes. All are made from uniformly drawn high quality tubing for extended service life and your safety.

Weighing Scoop



7840 - TUBES Blood Sugar, Folin-Wu

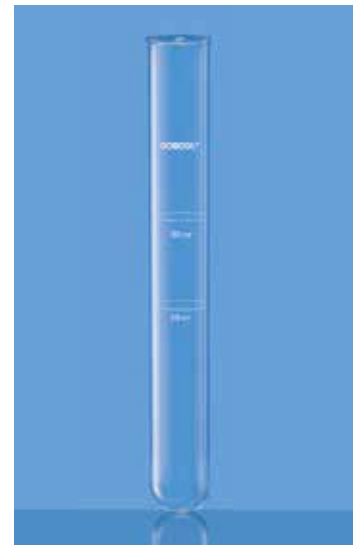
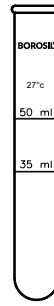
- Complies with IS 3740
- Made of uniformly drawn high quality tubing for extended service life
- The tube is calibrated at 12.5 ml and 25 ml

Product Code	Capacity ml	Approx O.D. x Length mm	Quantity Per Case
7840009	25	20 x 220	20

7920 - TUBES

Digestion, Folin - Wu

- Made from uniformly drawn high quality tubing for extended service life
- The tube is calibrated at 35 ml and 50 ml



Product Code	Approx O.D. x Length	Quantity Per Case mm
7920057	25 x 200	20

8060 - TUBES

Centrifuge, Conical Bottom Plain

- Made of uniformly drawn high quality tubing for extended service life
- The higher density fraction collects in the pointed centre of the base
- Consequently, even small amounts of solids can be collected and separated



Product Code	Capacity ml	Approx O.D. x Length mm	Quantity Per Case
8060007	15	17 x 120	100

8080 - TUBES

Centrifuge, Conical Bottom, Graduated

- Made of uniformly drawn high quality tubing for extended service life
- The higher density fraction collects in the pointed centre of the base
- Consequently, even small amounts of solids can be collected and separated
- Graduated for greater precision



Product Code	Capacity ml	Approx O.D. x Length mm	Quantity Per Case
8080007	15	17 x 120	30
8080012	50	29 x 140	20

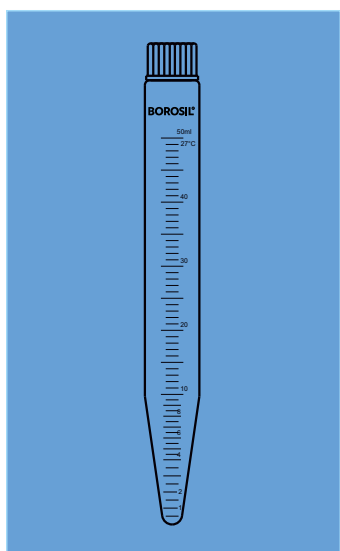


8084 - TUBES

Centrifuge, Conical Bottom, Graduated, with Stopper

- Made of uniformly drawn high quality tubing for extended service life
- The higher density fraction collects in the pointed centre of the base
- Consequently, even small amounts of solids can be collected and separated
- Graduated tubes for greater precision
- Equipped with a stopper

Product Code	Capacity ml	Approx O.D. x Length mm	Quantity Per Case
8084007	15	17 x 139	30
8084012	50	29 x 165	10



8090 - TUBES

Centrifuge conical bottom, graduated, with PP screw cap

Product Code	Capacity ml	Approx O.D. x Length mm	Quantity Per Case
8090007	15	17 x 130	30
8090012	50	29 x 150	10



8100 - STOPPERS

Interchangeable Ground Joint, Solid, Penny Head

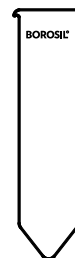
Product Code	Interchangeable Joint Size	Quantity per Case
8100A10	10 / 19	20
8100A12	12 / 21	20
8100A14	14 / 23	20
8100A19	19 / 26	20
8100A24	24 / 29	20
8100A29	29 / 32	20
8100A34	34 / 35	20

For products listed on the above table use HSN code 39235010

8320 - TUBES

Centrifuge, Short Conical Bottom, Pour Out, Heavy Duty, Plain

- Made of uniformly drawn high quality tubing for extended service life
- The higher density fraction collects in the pointed centre of the base
- Consequently, even small amounts of solids can be collected and separated



Product Code	Capacity ml	Approx O.D. x Length mm	Quantity Per Case	Price / Piece ₹
8320011	40	29 x 116	20	184.00

8340 - TUBES

Centrifuge, Short Conical Bottom, Pour Out, Heavy Duty, Graduated

- Made of uniformly drawn high quality tubing for extended service life
- The higher density fraction collects in the pointed centre of the base
- Consequently, even small amounts of solids can be collected and separated
- Graduated tubes for greater precision



Product Code	Capacity ml	Approx O.D. x Length mm	Quantity Per Case	Price / Piece ₹
8340011	40	29 x 116	20	329.00

Graduated upto 10 ml in 0.5 ml and from 10 ml to 40 ml in 1ml divisions

8400 - STOPPERS

Interchangeable Ground Joint, Solid, Penny Head, Amber



Product Code	Interchangeable Joint Size	Quantity per Case
8400A10	10 / 19	20
8400A12	12 / 21	20
8400A14	14 / 23	20
8400A19	19 / 26	20
8400A24	24 / 29	20
8400A29	29 / 32	20
8400A34	34 / 35	20

For products listed on the above table use HSN code 39235010

Adapters

The Adapter tubes listed below are the most widely used ones, and will enable a laboratory to assemble its own apparatus using the Flasks and Condensers listed earlier. The joints are fully interchangeable and made to the same precision as all Borosil ground joints.



8800 - ADAPTER

Enlarging, Interchangeable Joints

- Made of borosilicate glass
- An outer interchangeable joint at the top and a smaller inner interchangeable joint at the base
- These joints are made to the same precision as all Borosil ground joints



Product Code	Socket Joint Size	Cone Joint Size	Quantity Per Case
8800A01	19 / 26	14 / 23	5
8800A02	24 / 29	14 / 23	5
8800A03	24 / 29	19 / 26	5
8800A04	29 / 32	19 / 26	5
8800A05	29 / 32	24 / 29	5
8800A06	34 / 35	19 / 26	5
8800A07	34 / 35	24 / 29	5
8800A08	34 / 35	29 / 32	5

8820 - ADAPTER

Reduction, Interchangeable Joints

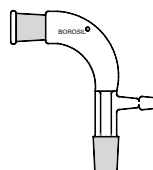
- Made of borosilicate glass
- An outer interchangeable joint at the top and a smaller inner interchangeable joint at the base
- These joints are made to the same precision as all Borosil ground joints.



Product Code	Socket Joint Size	Cone Joint Size	Quantity Per Case
8820A09	29 / 32	34 / 35	5
8820A10	14 / 23	19 / 26	5
8820A11	14 / 23	24 / 29	5
8820A13	19 / 26	29 / 32	5
8820A14	19 / 26	34 / 35	5
8820A15	24 / 29	29 / 32	5
8820A16	24 / 29	34 / 35	5
8820A17	29 / 32	40 / 38	5
8820A18	19 / 26	24 / 29	5

8830 - ADAPTER

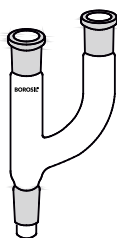
Receiver Bent With Vacuum Connection



Product Code	Socket Joint Size	Cone Joint Size	Quantity Per Case
8830614	14 / 23	14 / 23	5
8830619	19 / 26	19 / 26	5
8830719	19 / 26	24 / 29	5
8830624	24 / 29	24 / 29	5
8830724	24 / 29	29 / 32	5
8830629	29 / 32	29 / 32	5

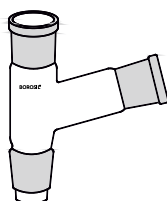


- Adapters
- Test Tubes
- Sintered Ware
- Quartz Ware



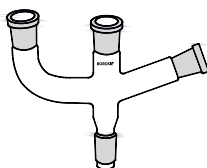
8831 - ADAPTER MULTIPLE With Two Neck Parallel

Product Code	Socket Joint Size	Cone Joint Size	Quantity Per Case
8831614	14 / 23	14 / 23	5
8831619	19 / 26	19 / 26	5
8831719	19 / 26	24 / 29	5
8831624	24 / 29	24 / 29	5
8831819	19 / 26	34 / 35	5
8831629	29 / 32	29 / 32	5



8832-ADAPTER MULTIPLE with Two Necks - one Vertical & one at 45°

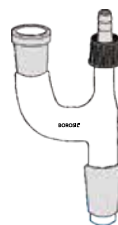
Product Code	Socket Joint Size	Cone Joint Size	Quantity Per Case
8832619	19 / 26	19 / 26	5
8832719	19 / 26	24 / 29	5
8832819	19 / 26	34 / 35	5



8833 - ADAPTER MULTIPLE with Three Neck, Two Parallel & one at 45°

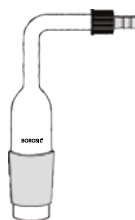
Product Code	Socket Joint Size	Cone Joint Size	Quantity Per Case
8833A19	19 / 26	24 / 29	5
8833B19	19 / 26	29 / 32	5
8833C19	19 / 26	34 / 35	5
8833D19	19 / 26	45 / 40	5

8834 - SWAN NECK



Product Code	Socket Joint Size	Cone Joint Size	Quantity Per Case
8834619	19 / 26	19 / 26	5
8834719	19 / 26	24 / 29	5
8834624	24 / 29	24 / 29	5
8834724	24 / 29	34 / 35	5

8835 - ADAPTER CONE / RUBBER TUBING



Product Code	Socket Joint Size	Quantity Per Case
8835A10	10 / 19	5
8835A14	14 / 23	5
8835A19	19 / 26	5
8835A24	24 / 29	5
8835A29	29 / 32	5

8836 - ADAPTER CONE / FLEXIBLE TUBING



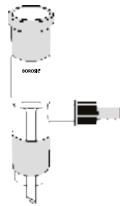
Product Code	Socket Joint Size	Quantity Per Case
8836A14	14 / 23	5
8836A19	19 / 26	5
8836A24	24 / 29	5
8836A29	29 / 32	5
8836B10	10 / 19	5
8836B14	14 / 23	5
8836B19	19 / 26	5
8836B24	24 / 29	5
8836B29	29 / 32	5





8837- ADAPTER RECEIVER Straight Socket To Rubber

Product Code	Socket Joint Size	Quantity Per Case
8837A14	14 / 23	5
8837A19	19 / 26	5
8837A24	24 / 29	5
8837A34	34 / 35	5



8838 - ADAPTER RECEIVER Straight With Vacuum

Product Code	Socket Joint Size	Cone Joint Size	Quantity Per Case
8838614	14 / 23	14 / 23	5
8838714	14 / 23	19 / 26	5
8838814	14 / 23	24 / 29	5
8838619	19 / 26	19 / 26	5
8838719	19 / 26	24 / 29	5
8838624	24 / 29	24 / 29	5
8838724	24 / 29	29 / 32	5



8839 - ADAPTER RECEIVER Bend With Vent

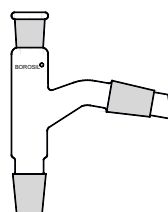
Product Code	Socket Joint Size	Cone Joint Size	Quantity Per Case	Price / Piece ₹
8839614	14 / 23	14 / 23	5	260.00
8839619	19 / 26	19 / 26	5	296.00
8839719	19 / 26	24 / 29	5	354.00
8839624	24 / 29	24 / 29	5	385.00
8839629	29 / 32	29 / 32	5	556.00

8840 - ADAPTER CONES SCREW THREAD



Product Code	Socket Joint Size	Quantity Per Case
8840A14	14 / 23	5
8840A19	19 / 26	5
8840A24	24 / 29	5
8840A29	29 / 32	5

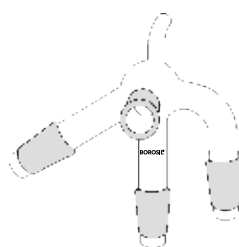
8841 - SLOPPING PLANE STILL HEAD



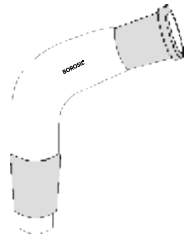
Product Code	Flask Cone	Cond. Cone	Socket	Quantity Per Case
8841610	10 / 19	10 / 19	10 / 19	5
8841614	14 / 23	14 / 23	14 / 23	5
8841619	19 / 26	19 / 26	14 / 23	5
8841819	19 / 26	19 / 26	19 / 26	5
8841724	24 / 29	19 / 26	14 / 23	5
8841624	24 / 29	24 / 29	19 / 26	5
8841729	29 / 32	19 / 26	14 / 23	5
8841629	29 / 32	29 / 32	14 / 23	5
8841634	34 / 35	19 / 26	14 / 23	5
8841734	34 / 35	24 / 29	14 / 23	5
8841834	34 / 35	34 / 35	14 / 23	5

8844 - ADAPTER RECEIVER

Multiple Connectivity

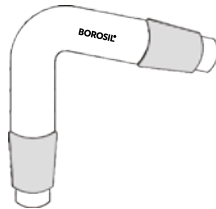


Product Code	Socket Joint Size	Cone Joint Size	Quantity Per Case
8844614	14 / 23	14 / 23	5
8844714	14 / 23	19 / 26	5
8844619	19 / 26	19 / 26	5



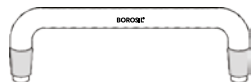
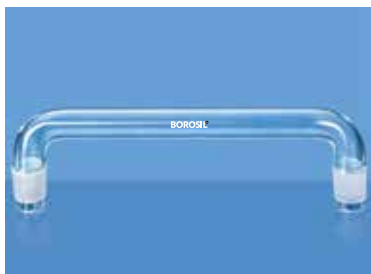
8845 - ADAPTER RECEIVER Plain Bend

Product Code	Socket Joint Size	Cone Joint Size	Quantity Per Case
8845619	19 / 26	19 / 26	5
8845719	19 / 26	24 / 29	5
8845624	24 / 29	24 / 29	5
8845629	29 / 32	29 / 32	5



8846 - ADAPTER RECOVERY BEND With Sloping End

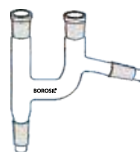
Product Code	Socket Joint Size	Cone Joint Size	Quantity Per Case
8846614	14 / 23	14 / 23	5
8846724	24 / 29	14 / 23	5
8846619	19 / 26	19 / 26	5
8846824	24 / 29	19 / 26	5
8846729	29 / 32	19 / 26	5
8846734	34 / 35	19 / 26	5
8846624	24 / 29	24 / 29	5
8846834	34 / 35	24 / 29	5
8846634	34 / 35	34 / 35	5



8847 - ADAPTER RECOVERY Bend Vertical

Product Code	Socket Joint Size	Cone Joint Size	Quantity Per Case
8847614	14 / 23	14 / 23	5
8847619	19 / 26	19 / 26	5
8847724	24 / 29	14 / 23	5
8847624	24 / 29	24 / 29	5
8847629	29 / 32	29 / 32	5

8849 - CLAISEN HEAD SLOPING



Product Code	Socket Joint Size	Cone Joint Size	Quantity Per Case
8849614	14 / 23	14 / 23	5
8849619	19 / 26	19 / 26	5
8849724	24 / 29	19 / 26	5
8849624	24 / 29	24 / 29	5
8849629	29 / 32	29 / 32	5
8849734	34 / 35	24 / 29	5

8850 - ADAPTER RECEIVER PLAIN, VERTICAL

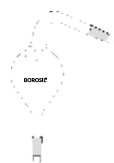


Product Code	Socket Joint Size	Cone Joint Size	Quantity Per Case
8850614	14 / 23	14 / 23	5
8850719	19 / 26	24 / 29	5
8830724	24 / 29	29 / 32	5

8851 - SPLASH HEAD Vertical Pear Shape



Product Code	Socket Joint Size	Cone Joint Size	Quantity Per Case
8851619	19 / 26	19 / 26	5
8851724	24 / 29	19 / 26	5
8851624	24 / 29	24 / 29	5
8851629	29 / 32	29 / 32	5



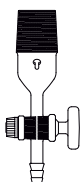
8852 - SPLASH HEAD SLOPING PEAR SHAPE

Product Code	Socket Joint Size	Cone Joint Size	Quantity Per Case
8852619	19 / 26	19 / 26	5
8852724	24 / 29	19 / 26	5
8852624	24 / 29	24 / 29	5
8852629	29 / 32	29 / 32	5



8853 - STEAM DISTILLATION HEADS

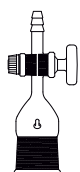
Product Code	Socket Joint Size	Cone Joint Size	Quantity Per Case
8853724	24 / 29	19 / 26	5
8853734	34 / 35	19 / 26	5
8853834	34 / 35	24 / 29	5



8854 - ADAPTOR Straight cone with stopcock

- Made from 3.3 borosilicate glass, USP Type I

Product Code	Cone Joint Size	Stopcock Bore mm	Quantity Per Case
8854014	14 / 23	2	5
8854019	19 / 26	2	5
8854024	24 / 29	2	5
8854029	29 / 32	2	5
8854034	34 / 35	2	5



8855 - ADAPTOR Straight socket with stopcock

- Made from 3.3 borosilicate glass, USP Type I

Product Code	Cone Joint Size	Stopcock Bore mm	Quantity Per Case
8855014	14 / 23	2	5
8855019	19 / 26	2	5
8855024	24 / 29	2	5
8855029	29 / 32	2	5
8855034	34 / 35	2	5

8856 - ADAPTOR

Bend cone with stopcock

- Made from 3.3 borosilicate glass, USP Type I

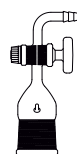


Product Code	Cone Joint Size	Stopcock Bore mm	Quantity Per Case
8856014	14 / 23	2	5
8856019	19 / 26	2	5
8856024	24 / 29	2	5
8856029	29 / 32	2	5
8856034	34 / 35	2	5

8857 - ADAPTOR

Bend Socket with stopcock

- Made from 3.3 borosilicate glass, USP Type I



Product Code	Cone Joint Size	Stopcock Bore mm	Quantity Per Case
8857014	14 / 23	2	5
8857019	19 / 26	2	5
8857024	24 / 29	2	5
8857029	29 / 32	2	5
8857034	34 / 35	2	5

8861 - THERMOMETER POCKET

Long type

- Made from 3.3 borosilicate glass, USP Type I



Product Code	Cone Joint Size	Stopcock Bore mm	Quantity Per Case
8861014	14 / 23	2	10
8861019	19 / 26	2	10
8861024	24 / 29	2	10
8861029	29 / 32	2	10
8861034	34 / 35	2	10

8862 - THERMOMETER POCKET

Short type

- Made from 3.3 borosilicate glass, USP Type I



Product Code	Cone Joint Size	Stopcock Bore mm	Quantity Per Case
8862014	14 / 23	2	10
8862019	19 / 26	2	10
8862024	24 / 29	2	10

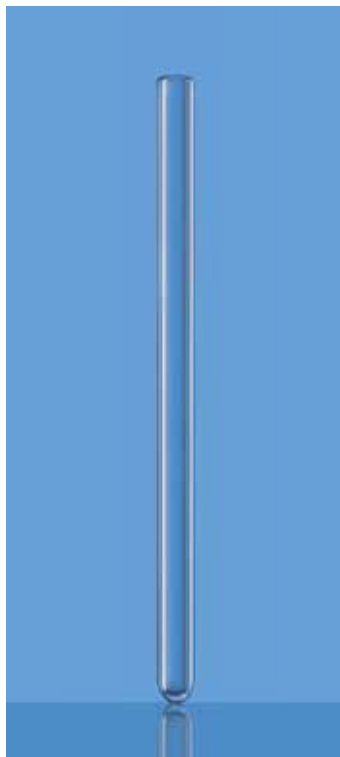


9800 - TUBES, Test, With Rim

- Complies with IS 2618, ISO / DIN 4142
- Made of borosilicate glass, designed with a round bottom
- Made thick-walled, mechanically very resistant
- High thermal shock resistance
- Designed with a rim

Product Code	Capacity ml	Approx O.D. x Length mm	Quantity Per Case
9800U01	3	10 x 75	800
9800U02	5	12 x 75	800
9800U03	7	12 x 100	800
9800U15	4	13 x 55*	800
9800U04	13	15 x 125	800
9800U05	15	15 x 150	800
9800U06	27	18 x 150	400
9800U07	38	25 x 100	200
9800U08	55	25 x 150	200
9800U09	70	25 x 200	100
9800U10	100	32 x 200	50
9800U11	170	38 x 200	50

* IS : 3740 for tube widal



9801 - TUBE FOR CULTURE COLLECTION

- Made of borosilicate glass, designed with a round bottom
- Made thick-walled, mechanically very resistant
- High thermal shock resistance
- Used for pathological tests

Product Code	Approx O.D. x Length mm	Quantity Per Case
9801U01	7 x 127	200

Used for pathological tests

9820 - TUBES

Test (Culture), Without Rim

- Complies with IS 2618, ISO / DIN 4142
- Made of borosilicate glass, designed with a round bottom
- Made thick-walled, mechanically very resistant
- High thermal shock resistance
- Designed without a rim



Product Code	Capacity ml	Approx O.D. x Length mm	Quantity Per Case
9820U16	1	7 x 60*	400
9820U01	3	10 x 75***	800
9820U02	5	12 x 75**/***	800
9820U03	7	12 x 100***	800
9820U17	8	12 x 125***	800
9820U04	13	15 x 125	800
9820U05	15	15 x 150	400
9820U12	12	16 x 100***	800
9820U18	20	16 x 150***	400
9820U06	27	18 x 150	400
9820U19	25	19 x 125***	400
9820U07	38	25 x 100	200
9820U08	55	25 x 150***	200
9820U09	70	25 x 200	100
9820U10	100	32 x 200	50
9820U11	170	38 x 200	50

* IS:3740 - 1966 for DURHAM FERMENTATION

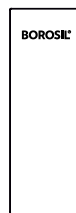
** IS:3740 - 1966 for KAHN & WASSERMAN TEST

*** IS:3740 - 1966 for BACTERIOLOGICAL TEST

9821 - TUBE

Flat Bottom without RIM

- Made of borosilicate glass, designed with a flat bottom
- High thermal shock resistance
- Designed without a rim
- Used for pathological tests and disintegration apparatus



Product Code	Approx O.D. x Length mm	Quantity Per Case
9821U42	12 x 75	800

Test Tubes



9822 - TUBE

Flat Bottom with Rim



- Made of borosilicate glass, designed with a flat bottom
- High thermal shock resistance
- Designed with rim
- Used for pathological tests and disintegration apparatus

Product Code	Approx O.D. x Length mm	Quantity Per Case
9822U06	18 x 138	400
9822U07	18 x 55	100
9822U04	14 x 110	800



9830 - TUBES

Test Graduated, with interchangeable Stopper



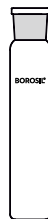
- Made of borosilicate glass, designed with a round bottom
- Made thick-walled, mechanically very resistant
- High thermal shock resistance
- These Test Tubes are graduated for greater precision

Product Code	Capacity ml	Approx O.D.xLength mm	Stopper Size	Quantity Per Case
9830006	10	17 x 160	10 / 19	10
9830007	15	15 x 150	14 / 23	10
9830008	20	19 x 160	14 / 23	10
9830010	30	25 x 155	19 / 26	10
9830012	50	25 x 200	19 / 26	10
9830016	100	34 x 210	24 / 29	10



9835 - TUBES

COD Digestion Tube

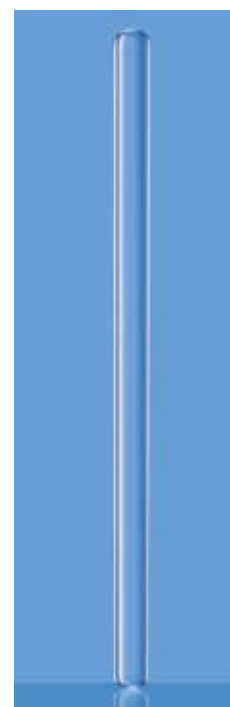


- Made from thick walled, mechanically very resistance borosilicate glass
- Used in COD Disintegration

Product Code	Approx O.D. x Length mm	Quantity Per Case
9835A01	36 x 205	10
9835001	39 x 205	10

9850 - STIRRER

- Made of polished 3.3 borosilicate glass

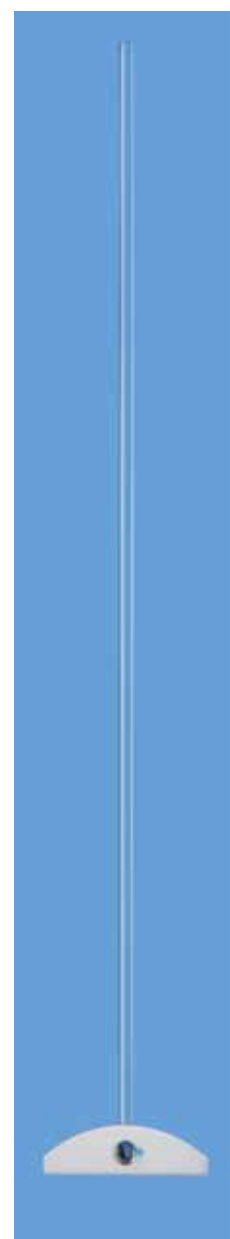
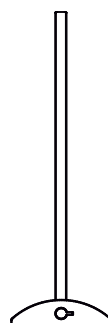


Product	Approx mm	Quantity
9850107	7 x 150	20
9850207	7 x 205	20
9850307	7 x 255	20
9850407	7 x 305	20
9850109	9 x 150	20
9850209	9 x 205	20
9850309	9 x 255	20
9850409	9 x 305	20

9860 - STIRRERS

with PTFE Blade

- Ideal for very sensitive samples
- Made of polished 3.3 borosilicate glass
- Provided with chemically inert PTFE blade
- Application in synthetic laboratory



Product Code	Description	Quantity Per Case
9860065	Shaft Dia 6 mm & Length 450 mm Blade Width 50 mm, Suitable for 500 ml Flask, Socket 19 / 26	10
9860071	Shaft Dia 6 mm & Length 450 mm Blade Width 75 mm, Suitable for 1000 ml Flask, Socket 24 / 29	10
9860077	Shaft Dia 8 mm & Length 600 mm Blade Width 100 mm, Suitable for 2000 ml Flask, Socket 34 / 35	5
9860080	Shaft Dia 8 mm & Length 600 mm Blade Width 125 mm, Suitable for 5000 ml Flask, Socket 34 / 35	5
9860081	Shaft Dia 10 mm & Length 750 mm Blade Width 150 mm, Suitable for 10000 ml Flask, Socket 55 / 44	5
9860087	Shaft Dia 10 mm & Length 750 mm Blade Width 200 mm, Suitable for 20000 ml Flask, Socket 55 / 44	5

Test Tubes



9900 - TUBES

Culture, Media, Round Bottom, with PP Screw Cap and Liner

- Made of borosilicate glass, designed with a round bottom
- The ideal replacement for media culture bottles
- Designed with special caps to facilitate handling and sealing

Product Code	Capacity ml	Approx O.D. x Length mm	Quantity Per Case
9900005	5	16 x 75	100
9900006	10	16 x 125	100
9900010	30	25 x 100	100
9900012	50	25 x 150	50
9900013	60	25 x 200	50
9900018	150 [#]	38 x 200	50

All caps are Polypropylene with PTFE liner, except 150 ml

[#]Blue colour cap without PTFE liner & autoclavable up to 140°



9901 - TUBES

Culture, Amber, Media, Round Bottom, with PP Screw Cap and PTFE Liner

- Made of borosilicate glass, designed with a round bottom
- The ideal replacement for media culture bottles
- The uniform Amber colour is highly durable and has high chemical resistance.
- Designed with special caps to facilitate handling and sealing

Product Code	Capacity ml	Approx O.D. x Length mm	Quantity Per Case
9901005	5	16 x 75	100
9901006	10	16 x 125	100
9901010	30	25 x 100	100
9901013	60	25 x 200	50
9901018	150 [#]	38 x 200	50

• All caps are Polypropylene with PTFE liner, except 150 ml

• [#]Blue colour cap without PTFE liner & autoclavable up to 140°



9910 - TUBES

Culture, Media, Flat Bottom, with PP Screw Cap and PTFE Liner

- Made of borosilicate glass, designed with a flat bottom for convenient storage
- The ideal replacement for Bijou, Mc Cartney and universal bottles
- Designed with special caps to facilitate handling and sealing
- Caps are autoclavable (Steam Sterilisation upto 121°C)

Product Code	Capacity ml	Approx O.D. x Length mm	Quantity Per Case
9910005	5	16 x 50	100
9910006	10	25 x 50	100
9910007	15	25 x 57	100
9910008	20	25 x 72	100
9910010	30	25 x 95	100
9910012	50	25 x 145	50

9911 - TUBES

Culture, Amber, Media, Flat Bottom, with PP Screw Cap and PTFE Liner

- Made of Type I Class "A" 3.3 expansion borosilicate glass (ASTM 438)
- The ideal replacement for Bijou, Mc Cartney and universal bottles
- Designed with special caps to facilitate handling and sealing
- Caps are autoclavable (Steam Sterilisation upto 121°C)

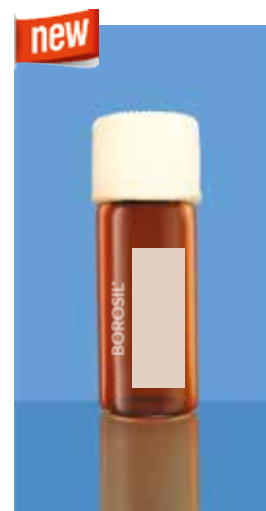
Product Code	Capacity ml	Approx O.D. x Length mm	Quantity Per Case
9911005	5	16 x 50	100
9911006	10	25 x 50	100
9911007	15	25 x 57	100
9911008	20	25 x 72	100
9911010	30	25 x 95	100



9913 - VIALS

Sampling & Storage Screw Neck Vials, Amber, with Write on Patch

- Sampling & Storage Screw Neck Vials, Amber with Write on Patch pre-assembled with PP Screw Cap with PTFE liner
- Made from USP Type I, 5.1 expansion borosilicate glass (Glass Type as per ASTM E-438)
- Complies glass composition and spectral transmission test as per USP chapter 660/ USP 40 and European pharmacopoeia 9.0
- Packed in ISO "Class 8" clean room facility
- Ideal for working standard storage, sampling of specimen samples of raw materials and finish products
- AMBER colour protects light sensitive materials



Product Code	Capacity ml	Approx Mouth ID in mm	Dimension O.D. x Length in mm
9913003	3	10	16 x 36
9913005	5	10	16 x 55
9913006	10	16.5	24 x 50
9913007	15	16.5	24 x 58
9913008	20	16.5	24 x 70
9913010	30	16.5	24 x 95

*Available in minimum pack of 1050 Nos

9986 - WATCH GLASSES

Borosil S - Line

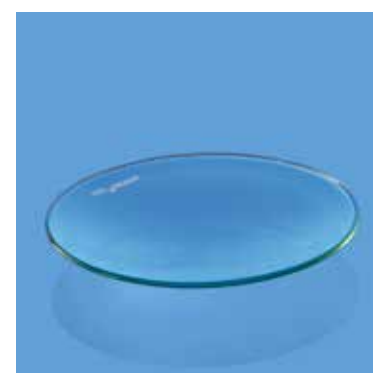
- Made of soda glass
- A special process is used that results in an absolutely flat curved surface
- High clarity, free of bubbles
- All of them are moulded to the same radius of curvature for convenient stacking



Product Code	Capacity ml	Quantity Per Case
9986072	80	50
9986077	100	50
9986079	120	20
9986081	150	20

Watch Glasses

Test Tubes



Sintered Ware

Technical Data

Borosil Sintered Glassware is used for filtration of liquids and gases in the laboratory. It has a non-corrosive and reusable porous glass disc as the filter media. It is also used for gas washing, dispersion and absorption.

The Sintered Disc is manufactured by crushing Borosil glass, and then powdering, cleaning and separating it into various mesh sizes, and finally, fusing it together in the form of a Disc. Sintered Discs are classified into 5 grades - G1, G2, G3, G4 and G5. The grades are defined in terms of the maximum pore size that is obtained by measuring the pressure at which the first air bubble breaks away from the filter, under specified conditions. The pressure differential is then used to calculate the equivalent capillary diameters in microns. The desired pore size is obtained by controlling the grain size, firing time, temperature and thickness of the Disc. Each Disc is tested and graded individually.

The pore diameters are reasonably uniform, which ensures the required flow rate through the filter. The flow rate further depends on the pressure differential between the two sides of the Disc, the free area of the Disc, viscosity of the fluid being filtered, and other factors. There is a fair amount of uniformity in the pore size of different Discs of the same size and grade. Hence, the results from two or more Discs of the same size and grade will be uniform, thereby ensuring reproducible analytical results.

The Discs have maximum surface hardness and hence, the glass powder does not get scraped off while cleaning or with chemicals. The filters do not shed particles during usage.

The Discs are sealed to tubing without blocking the pores. They are then annealed properly in automatically controlled Lehrs.

Porosity Grades And Their General Use

Porosity Grade	Pore Size (Microns)	General use
1	90-150	Filtration of coarse materials / precipitates, gas dispersion, gas washing, extractor bed, support for other filter materials.
2	40-90	Filtration of medium precipitates gas dispersion, gas washing.
3	15-40	Filtration of fine grain precipitates. Analytical work with medium precipitates. Mercury filtration
4	5-15	Analytical work with fine and very fine precipitates. Non return mercury valves.
5	1-2	Bacteriological filtration.

Chemical Durability

Borosil Sintered Ware is manufactured with the same high quality material of which all Borosil brand borosilicate laboratory glassware is made, ensuring excellent resistance to chemical attack.

Operating Pressure

Sintered Discs, and the glassware that incorporates them, are designed mainly for the application of vacuum or for passage of gases at relatively low pressure. In all cases, the differential pressure must not exceed 100 kN / m² (15 psi).

Thermal Limitations

Sintered Ware has a lower level of resistance to thermal shock as compared to standard Borosil glassware. Therefore, articles of Sintered Ware should not be subjected to excessive temperature changes or direct flames.

Borosil Sintered Crucibles are especially suitable for drying to constant weight. Dry Sintered Crucibles at room temperature, can be placed directly into a drying oven. Sintered Ware may safely be heated in a furnace to 500°C without any adverse effects, while ensuring that the cycle of heating and cooling is gradual. It is recommended that the rate of heating does not exceed 20°C/min. This prevents internal strains caused by excessive temperature differences between the surrounding glass vessel and the Sintered Disc that, in turn, can lead to fracture of the apparatus.

When cold and damp, Sintered Ware of porosity grades 4 and 5 should never be subjected to a sudden temperature change as the evolution of steam may generate pressure within the filter, sufficient to crack it.

Filtration Apparatus should be kept on its rim (stem upwards) in an oven or steriliser. A perforated support base is advantageous for air convection in case of pipeline filters. By using heat insulating material such as asbestos, care should be taken to avoid premature heating near the filter seal. The apparatus should remain in the oven or steriliser during cooling, to prevent excessively fast cooling.

Cleaning Of Sintered Ware

New Sintered Filters should be washed carefully with hot hydrochloric acid, and then rinsed with distilled water before use. Such treatment ensures that all loose particles are removed from the Filter.

It is advisable to clean all Sintered Filters thoroughly, immediately after use, as cleaning is easiest at this time, and it also reduces the risk of contamination in the next use.

Many precipitates can be removed from the filter by back-flushing with water. However, great care must be taken with large diameters and fine filters, as positive pressures on the reverse side may break the filter.

Under no circumstances should Sintered Apparatus be subjected to mains water pressure when back-flushing, as in most instances this leads to fractured filters.

Drawing water through the filter from the reverse side, by means of a vacuum pump, is also effective.

Filters clogged with dust and dirt during gas filtration can be restored by treatment with warm detergent solution, followed by blowing clean air through, from the clean side of the filter. Dirt particles are brought to the surface by the foam, and removed by rinsing with water.

Some precipitates that clog the filter may be removed by chemical cleaning, as indicated below:

- **Fats and grease**
Carbon tetrachloride or suitable organic solvent
- **Albumen glucose:**
Hot ammonia or hydrochloric acid, mixture of hot concentrated sulphuric and nitric acids
- **Organic substances :**
'Chromic' acid cleaning solution* or concentrated sulphuric acid containing a little potassium nitrate or perchlorate (0.5%) (may need to be soaked overnight)
- **Copper or iron oxide :**
Hot concentrated hydrochloric acid with potassium chlorate.
- **Barium sulphate :**
Hot concentrated sulphuric acid
- **Mercury Residues :**
Hot concentrate nitric acid
- **Mercury Sulphide :**
Hot aqua regia
- **Silver chloride :**
Ammonia or sodium hyposulphite
- **Stannic oxide :**
Boiling sulphuric acid**

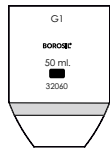
Alumina or silica residues :

2% hydrofluoric acid followed by concentrated sulphuric acid. Rinse immediately with distilled water and then with acetone. Continue rinsing until no trace of acid remains.

High concentrations of hydrofluoric acid, hot phosphoric acid or caustic alkali solutions should never be used for cleaning. Using these causes a rapid deterioration in the filter and an increase in pore size.

* For bacteriological, pharmaceutical and biological work, 'chromic' acid cleaning solution should be avoided in view of the biological effect of chromium ions.

** Boiling sulphuric acid may introduce undue thermal strain. It is therefore advisable to leave the item in the acid to cool.



32060 - CRUCIBLE

Gooch Type, Low Form, with Sintered Disc

- Made of 3.3 borosilicate glass
- Particularly adapted to analytical work where precipitates are dried to constant weight at 110°C
- Crucibles should not be subjected to sudden temperature changes
- In order to avoid strain, they should not be removed from the furnace until the temperature has dropped to 250°C
- Gooch Crucible is used for metal casting and analysis

Product Code	Capacity ml	Porosity Grade mm	Dia of Disc mm	Approx Height	Quantity Per Case
3206007	15	1	20	50	10
3206607	15	2	20	50	10
3206707	15	3	20	50	10
3206807	15	4	20	50	10
3206907	15	5	20	50	10
3206010	30	1	30	60	10
3206610	30	2	30	60	10
3206710	30	3	30	60	10
3206810	30	4	30	60	10
3206910	30	5	30	60	10
3206012	50	1	40	65	10
3206612	50	2	40	65	10
3206712	50	3	40	65	10
3206812	50	4	40	65	10
3206912	50	5	40	65	10

32061 - TUBES

Filter, for Gooch Crucibles (Herarchi) Funnel

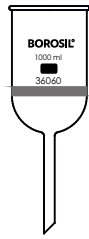
- Made of 3.3 borosilicate glass
- Suitable for use with Borosil's Filtering Crucibles Gooch type with Sintered Disc



Product Code	Approx O.D. x Length mm	Quantity Per Case
3206127	27 x 150	5
3206136	36 x 160	5
3206156	56 x 170	10

These are suitable for use with our filtering crucibles Gooch Type with sintered disc, No. 32060 lower part 8 mm O.D. x 75 mm length in all sizes.





36060 - FUNNELS

Buchner Type, with Sintered Disc

- Made of 3.3 borosilicate glass
- Especially useful where the filter paper may be attacked by filtered material
- Generally used in qualitative inorganic analysis and preparative chemistry
- Resistant to corrosion and heat

Product Code	Capacity ml	Porosity Grade	Dia of Disc mm	Approx Height mm	Stem Dia mm	Quantity Per Case
3606058	35	1	30	130	8	5
3606658	35	2	30	130	8	5
3606758	35	3	30	130	8	5
3606858	35	4	30	130	8	5
3606958	35	5	30	130	8	5
3606072	80	1	35	142	8	5
3606672	80	2	35	142	8	5
3606772	80	3	35	142	8	5
3606872	80	4	35	142	8	5
3606972	80	5	35	142	8	5
3606020	200	1	68	215	13A	5
3606620	200	2	68	215	13	5
3606720	200	3	68	215	13	5
3606820	200	4	68	215	13	5
3606920	200	5	68	215	13	5
3606024	500	1	92	258	17	2
3606624	500	2	92	258	17	2
3606724	500	3	92	258	17	2
3606824	500	4	92	258	17	2
3606924	500	5	92	258	17	2
3606029	1000	1	124	276	19	2
3606629	1000	2	124	276	19	2
3606729	1000	3	124	276	19	2
3606829	1000	4	124	276	19	2
3606929	1000	5	124	276	19	2

Boron Free Transparent Silica

Borosil Fused Silica 99.95% SiO₂ surpasses all of the desirable chemical and weathering durability properties usually associated with opaque Silica ware. We manufacture as per IS and BS Standards.

- a) There is little or no visible surface change or damage to silica with prolonged exposure to water, atmospheric gases, contaminants, oxide of nitrogen and ozone.
- b) Attack does occur, on exposure to alkaline solution and acids at very high temperatures.
- c) Low expansion and hence excellent dimensional stability and thermal shock resistance.

Resistant to chemical attack

Virtually unaffected by sulphuric, nitric and hydrochloric acids. Hot alkalies and certain metal oxides react on silica. It is attacked by hydrofluoric acid. At high temperatures, it is also attacked by phosphoric acid.

Continuous use of fused silica above 1000°C leads to devitrification with formation of cristobalite which is a crystalline phase and will lead to breakage on repeated use. For accurate and long use, it is advisable to wash the articles in distilled water and alcohol to remove trace impurities.

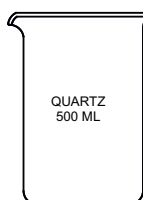
Heating fused quartz to elevated temperatures causes SiO₂ to undergo dissociation. Consequently, when flame-working fused quartz, there is a brand of haze or smoke which forms just outside the intensely heated region. This haze presumably forms because the SiO₂ recombines with oxygen from the air (and perhaps water) and condenses as extremely small particles of amorphous SiO₂.

Co-efficient of expansion 0°C to 800°C	5.5 X 10 ⁻⁷ cm / cm / °C
Softening Point	1685°C
Annealing Point	1200°C
Strain Point	1120°C
Operating Temp	1050°C
Electrical resistivity (at 350°C)	7 x 10 ⁷ ohm cm

1002 - BEAKERS

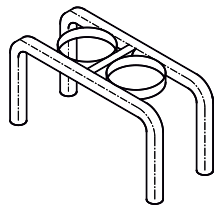
Low Form, With Spout

- Beaker with Spout for Clean Pouring
- Dimensional accuracy
- Tough construction
- Durability



Quartz Ware

Product Code	Capacity ml	Approx O.D. x Length mm	Quantity Per Case
1002009	25	35 x 45	5
1002012	50	40 x 58	5
1002016	100	50 x 75	5
1002018	150	55 x 88	5
1002021	250	70 x 95	1
1002024	500	85 x 115	1
1002029	1000	105 x 145	1



3175 - MUFFLE TRAYS

- Perfect finish
- Sturdiness
- Durability
- Holes: 2/4

Product Code	Capacity ml	Approx O.D. x Length mm	Quantity Per Case
3175041	2 Holes	39	1
3175042	4 Holes	76	1



3185 - DISHES / BASINS

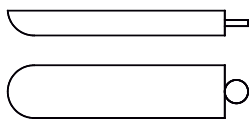
Round with Spout

- Perfect finish
- Accurate dimensions
- Longer life span

Product Code	Approx O.D. x Height mm	Nominal Capacity ml	Quantity Per Case
3185008	55 x 23	20	10
3185042	75 x 27	45	5
3185044	85 x 35	70	5
3185045	95 x 36	85	1
3185016	100 x 38	100	1
3185046	115 x 47	200	1

3186 - COMBUSTION BOATS WITH HANDLE

- Light in weight
- Longer life span
- Accurate dimensions
- Sturdiness



Product Code	Approx O.D. x Length mm	Quantity Per Case
3186Q01	12 x 77	1

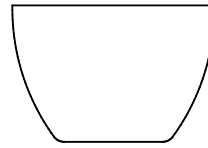
Prices for other sizes on request



3190 - CRUCIBLES

Without Lid

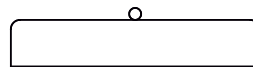
- Accurate dimensions
- Longer life span
- Fine finish
- Sturdiness



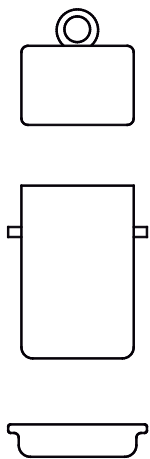
Product Code	Capacity ml	Approx O.D. x Length mm	Quantity Per Case
3190007	15	40 x 26	10
3190009	25	47 x 30	10
3190012	50	57 x 35	10
3190015	80	69 x 45	10
3190018	150	80 x 54	5

3191 - LIDS FOR CRUCIBLES

- Accurate dimension
- Longer life span
- Fine finish
- Sturdiness



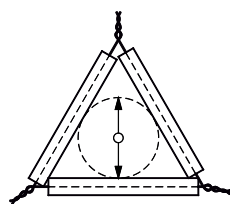
Product Code	Capacity ml	Quantity Per Case
3191007	15	10
3191009	25	10
3191012	50	10
3191015	80	10



VOLATILE MATTER CRUCIBLES

- Dimensional accuracy
- Tough construction
- Durability
- Comes with Lid and Plunger

Product Code	Catalogue No.	Item	Dimension mm	Quantity Per Case
3195041	3195	Crucible	25 x 38	5
3196041	3196	Plunger	12.5	5
3197041	3197	Lid		5



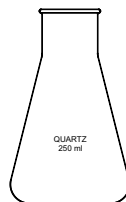
3198 - SILICA TRIANGLES on Nichrome (Translucent)

- Longer life span
- Sturdiness
- Seamless finish

Product Code	Capacity ml	Quantity Per Case
3198007	15	10
3198009	25	10
3198012	50	10
3198015	80	5

4984 - QUARTZ CONICAL FLASK

- Suitable for digestion of samples with concentrated acid (except HF)
- Ideal for estimation of boron in soil
- Withstand sudden heating & cooling

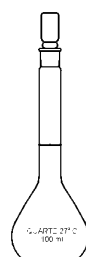


Product Code	External Dimension		Capacity ml
	O.D. mm	Height mm	
4984016	64	105	100
4984018	72	124	150
4984021	85	140	250

5644 - FLASKS VOLUMETRIC

Quartz

- Dimensional accuracy
- Sturdiness
- Durability
- Perfect finish



Product Code	Capacity ml	Quantity Per Case
5644005	5	1
5644006	10	1
5644009	25	1
5644012	50	1
5644016	100	1
5644021	250	1
5644024	500	1
5644029	1000	1

8600 - QUARTZ CIRCULAR

Capsule for Coal Analysis

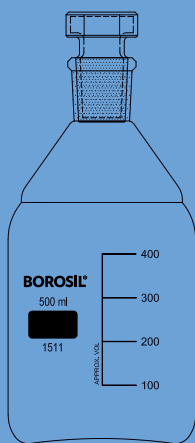
- Suitable for analysis of ash content in Coal analysis
- Withstand sudden heating & cooling



Product Code	External Dimension	
	Height mm	Diameter mm
8600Q01	14	48
8600Q02	15	54

*The ash content in coal is an important parameter in determining the quality of coal. Ash reduces the calorific value of coals and hence burning coals on a large scale require knowledge of their ash content. Analysis is fairly straight forward, with the coal thoroughly burnt at 750°C to 800°C and the ash material express as a percentage of the original weight. It gives an indication about the quality of coal.

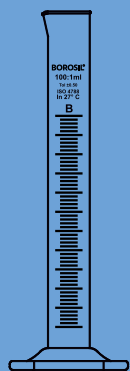
new



1511 - Bottle, Reagent, with hollow stopper, Quartz

Product Code	Capacity mm	Quantity Per Case
1511024	500	1

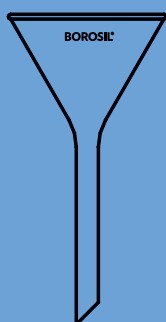
new



3028 - Measuring Cylinder W/Spout, Class B, Quartz

Product Code	Capacity ml	Quantity Per Case
3028005	5	1
3028006	10	1
30280092	5	1
3028012	50	1
3028016	100	1
30280212	50	1
3028024	500	1

new



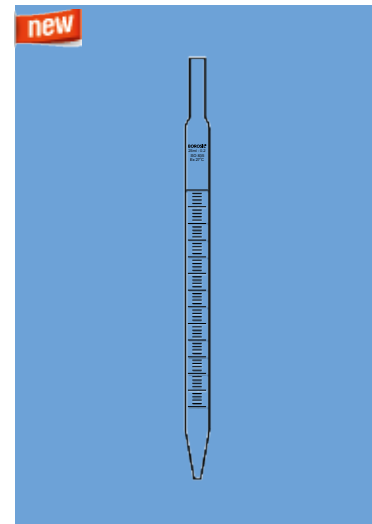
6141 - Funnel, Quartz - 75mm

Product Code	Capacity mm	Quantity Per Case
6141071	75	1

Quartz Ware

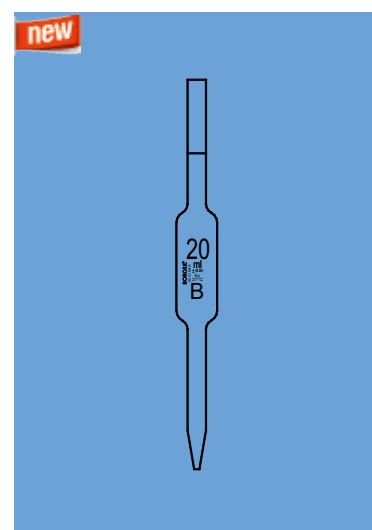
7064 - Pipette , Measuring, Mohr type, Quartz

Product Code	Capacity ml	Quantity Per Case
37064P41	1 x 0.01	1
37064P22	2 x 0.1	1
37064P55	5 x 0.1	1
37064P06	10 x 0.1	1



7104 - Pipette, Transfer, Volumetric, Class B, Quartz

Product Code	Capacity ml	Quantity Per Case
7104001	1	1
7104002	2	1
7104003	3	1
7104004	4	1
7104005	5	1
7104706	6	1
7104006	10	1



BOROSIL®

ANALYTICAL

Vials & Closures



“for Labs where
compliance matters”

Borosil certified Vials are manufactured in an ISO 9001 certified facility, in accordance with US and European Pharmacopoeia.

Easy ordering!!!

The 14 Digit Code

Whether you choose to buy a combipack that includes or only the vial closure, **BOROSIL's 14 digit code** makes it very easy in **FOUR** simple steps!

STEP 1

Vial / Cap Size

1. Start from the middle. The vial mouth size (outer) or the closure size is specified in digits 7 & 8. "09" for 9mm vial, "13" for 13mm, "20" for 20mm etc.

STEP 2

Combipack / Vial / Cap

The first TWO digits help you select how you want to buy,

1. A combipack of matching Vial & Closure, your product code will start with "VC"
2. Only a Vial, your product code will start with "VO"
3. Only a closure, your product code will start with "CS"

1	V	2	C	3	0	4	2	5	C	6	1	7	0	8	9	9	P	10	B	11	S	12	1	13	1	14	2
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----	---	----	---	----	---	----	---	----	---

STEP 3

When selecting a **Combipack** or just Vials, the Glass Component "Vial" specification is determined as,

1. 3rd & 4th digits of the code determines the volume of the vial you want to buy, i.e. "02" for a 2ml vial, "04" for a 4ml vial etc.
2. Digit 5, Choose the color of the glass, when buying a vial or a Combipack, "C" for "Clear glass" & "A" for Amber glass vial.
3. Do you want a writing patch? Digit 6, "1" for writing patch, "0" for vial without writing patch.

STEP 4

When selecting a **Combipack** or just Closures, specification is determined as,

1. Digit 9 tells you the material type of the closure,
 - a. "P" for PLASTIC
 - b. "A" for aluminum
2. Digit 10, gives the color of the closure,
 - a. "B" for BLUE
 - b. "C" for CLEAR
 - c. "S" for Silver
 - d. "K" for Black
3. Digit 11, gives the type of closure,
 - a. "S" for Screw
 - b. "C" for Crimp
 - c. "N" for Snap
4. Digit 12, "1" for BONDED Septa "0" for NON BONDED Septa
5. Digits 13 & 14, help you determine the type of septa.

• Vials
• Slides & Cover Glasses
• Lab Accessories

what's NEW?

VIALS



Vials made from USP TYPE I 3.3 EXPANSION GLASS

All Borosil vials are made from USP TYPE I Borosilicate glass tubing. 3.3 Expansion Glass is a special USP Type I clear glass with 81% silica. Acid resistance (DIN 12116) Class S1 and Alkali resistance (ISO 695) Class A2.

SCREW CAPS



MS Certified 9MM SCREW CAPS

Extremely low bleed, cleanest in the industry, demonstrated to have compounds at extremely low levels.

SAMPLING & STORAGE
VIAL



Sampling & Storage Vials Screw Neck Vials, **AMBER** with write on patch

EPA / TOC



EPA VOA Vials WITH CLOSED TOP CAPS

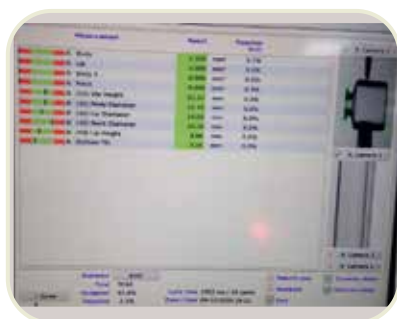
Vials with screwed-on caps that now come with a protective cover to prevent the chemical or environmental contamination during sample collection. Field samples can now be directly collected in the vials and the top cover of the cap can be removed only at the time of analysis in the lab.

QUALITY assurance



Raw Material

100% traceability across all manufacturing processes to raw materials. BMR confirms compliance to all critical specifications.



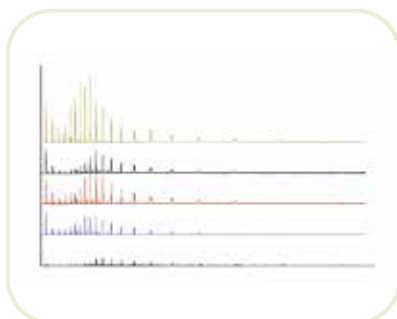
Dimensional Conformity

A vial's dimensions are extremely important to achieve smooth auto sampler functioning and proper vial cap fitment. Borosil vials are inspected with inline optical inspection systems to minimize both dimensional and cosmetic defects



SQC as per ISO 2589-1

In addition to in line inspection, sampling and inspection is also done by SQC for independent verification of process conformity.



Process Cleanliness Assurance

Vials are packed in a Class 8 clean room. Process cleanliness is also assured by tests to confirm vials to be free from residual organic and qualitative testing for non interference by LCMS.



360° Quality System

Conversion process free of human interaction
In line inspection, printing and annealing
Dimensional & Cosmetic inspection
Analytical compatibility Complete traceability.

Sample Vials & Closures

2 ml **VIALS** - USP Type I

Screw Neck Vial

Crimp Neck Vial



9 mm - 2ml Screw Neck Vials

Product Code	Volume	Write on Patch	Vial Pack	Vial Case
VO02C00900S000	2 ml		100	10 x 100
VO02C10900S000	2 ml	YES	100	10 x 100
VO02A00900S000	2 ml		100	10 x 100
VO02A10900S000	2 ml	YES	100	10 x 100

11 mm - 2ml Crimp Neck Vials

Product Code	Volume	Sets / Pack	Case Qty
VO02C01100C000	2 ml	100	10 X 100
VO02C11100C000	2 ml	100	10 X 100
VO02A01100C000	2 ml	100	10 X 100
VO02A11100C000	2 ml	100	10 X 100

Vial CAPS



9 mm - 2ml Screw Neck Caps

Product Code	Type	Pack Size	Vial Pack
CS000009PBS124	Everyday	100	10 x 100
CS000009PBS114	Everyday Pre - Slit	100	10 x 100
CS000009PBS111	Certified	100	10 x 100
CS000009PBS113	Certified Pre - Slit	100	10 x 100
CS000009PBSUM1	MS Certified	100	10 x 100
CS000009PBSUM2	MS Certified Pre - Slit	100	10 x 100

11 mm - 2ml Crimp Neck Caps

Product Code	Feature	Sets / Pack	Case Qty
CS000011ASC021	I	100	10 X 100
CS000011ASC022	Friction	100	10 X 100

Vials

VIALS & CAP Kits

2 ml Screw Neck - VIALS & CAP Kits

Product Code	Component	Volume	Neck Dia	Vial Colour	Type	Top
VC02C009PBS124	Vial & Cap Kit	2ml	9mm	CLEAR	Screw	Open
VC02C009PBS114	Vial & Cap Kit	2ml	9mm	CLEAR	Screw	Open
VC02C009PBS111	Vial & Cap Kit	2ml	9mm	CLEAR	Screw	Closed
VC02C009PBS113	Vial & Cap Kit	2ml	9mm	CLEAR	Screw	Open
VC02C109PBS124	Vial & Cap Kit	2ml	9mm	CLEAR	Screw	Open
VC02C109PBS114	Vial & Cap Kit	2ml	9mm	CLEAR	Screw	Open
VC02C109PBS111	Vial & Cap Kit	2ml	9mm	CLEAR	Screw	Open
VC02C109PBS113	Vial & Cap Kit	2ml	9mm	CLEAR	Screw	Open
VC02C109PBSUM1	Vial & Cap Kit	2ml	9mm	CLEAR	Screw	Closed
VC02C109PBSUM2	Vial & Cap Kit	2ml	9mm	CLEAR	Screw	Open
VC02A009PBS124	Vial & Cap Kit	2ml	9mm	AMBER	Screw	Open
VC02A009PBS114	Vial & Cap Kit	2ml	9mm	AMBER	Screw	Open
VC02A009PBS111	Vial & Cap Kit	2ml	9mm	AMBER	Screw	Open
VC02A009PBS113	Vial & Cap Kit	2ml	9mm	AMBER	Screw	Open
VC02A009PBS124	Vial & Cap Kit	2ml	9mm	AMBER	Screw	Open
VC02A109PBS114	Vial & Cap Kit	2ml	9mm	AMBER	Screw	Closed
VC02A109PBS111	Vial & Cap Kit	2ml	9mm	AMBER	Screw	Open
VC02A109PBS113	Vial & Cap Kit	2ml	9mm	AMBER	Screw	Open
VC02A109PBSUM1	Vial & Cap Kit	2ml	9mm	AMBER	Screw	Open
VC02A109PBSUM2	Vial & Cap Kit	2ml	9mm	AMBER	Screw	Open
VC02C409PBS111	Vial & Cap Kit	2ml	9mm	CLEAR	Screw	Open
VC02C409PBS113	Vial & Cap Kit	2ml	9mm	CLEAR	Screw	Open
VC02C409PBSUM1	Vial & Cap Kit	2ml	9mm	CLEAR	Screw	Open
VC02C409PBSUM2	Vial & Cap Kit	2ml	9mm	CLEAR	Screw	Open

2ml Crimp Neck - VIALS & CAP Kits

Product Code	Component	Volume	Neck Dia	Vial Colour	Type	Top
VC02C011ASC011	Vial & Cap Kit	2ml	11mm	Clear	Crimp	Open
VC02C011ASC012	Vial & Cap Kit	2ml	11mm	Clear	Crimp	Open
VC02C111ASC011	Vial & Cap Kit	2ml	11mm	Clear	Crimp	Open
VC02C111ASC012	Vial & Cap Kit	2ml	11mm	Clear	Crimp	Open
VC02A011ASC011	Vial & Cap Kit	2ml	11mm	AMBER	Crimp	Open
VC02A011ASC012	Vial & Cap Kit	2ml	11mm	AMBER	Crimp	Open
VC02A111ASC021	Vial & Cap Kit	2ml	11mm	AMBER	Crimp	Open
VC02A111ASC022	Vial & Cap Kit	2ml	11mm	AMBER	Crimp	Open

Vials

Septa MOC	Lining	Septa Mount	Feature	Sets / pk	Case Qty
Silicone	PTFE	Bonded		100	10X 100
Silicone	PTFE	Bonded	Pre Slit	100	10X 100
Silicone	PTFE	Bonded		100	10X 100
Silicone	PTFE	Bonded	Pre Slit	100	10X 100
Silicone	PTFE	Bonded		100	10X 100
Silicone	PTFE	Bonded	Pre-Slit Write-On	100	10X 100
Silicone	PTFE	Bonded		100	10X 100
Silicone	PTFE	Bonded	Pre-Slit Write-On	100	10X 100
Silicone	PTFE	Bonded	Pre-Slit Write-On	100	10X 100
Silicone	PTFE	Bonded		100	10X 100
Silicone	PTFE	Bonded		100	10X 100
Silicone	PTFE	Bonded	Pre-Slit	100	10X 100
Silicone	PTFE	Bonded		100	10X 100
Silicone	PTFE	Bonded	Pre-Slit	100	10X 100
Silicone	PTFE	Bonded		100	10X10
Silicone	PTFE	Bonded	Pre-Slit Write-On	100	10X 100
Silicone	PTFE	Bonded	Write-On	100	10X 100
Silicone	PTFE	Bonded	Pre Slit Write- On	100	10X 100
Silicone	PTFE	Bonded	Pre-Slit Write-On	100	10X 100
Silicone	PTFE	Bonded	Write-On	100	10X 100
Silicone	PTFE	Bonded	3.3 Exp	100	10X 100
Silicone	PTFE	Bonded	3.3 Exp Pre-Slit	100	10X 100
Silicone	PTFE	Bonded	3.3 Exp Pre-Slit	100	10X 100
Silicone	PTFE	Bonded	3.3 Exp	100	10X 100

Septa	Lining	Septa	Feature Profile	Sets / pk
Silicone	PTFE	Friction		100
Silicone	PTFE	Friction	Pre-Slit	100
Silicone	PTFE	Friction		100
Silicone	PTFE	Friction	Pre-Slit	100
Silicone	PTFE	Friction		100
Silicone	PTFE	Friction	Pre-Slit	100
Silicone	PTFE	Friction		100
Silicone	PTFE	Friction	Pre-Slit	100

Vials

Headspace Vials



Product Code	Vol	Mount Dia	Neck	Write On	Vial Height	Vial Profile	Vial / pk	Case Qty
VO10F12000C000	10ml	20mm	Crimp	Yes	45mm	Flat Bottom	100	5 X 100
VO10R12000C000	10ml	20mm	Crimp	Yes	45mm	Round Bottom	100	5 X 100
VO20F12000C000	20ml	20mm	Crimp	Yes	75mm	Flat Bottom	100	5 X 100
VO20R12000C000	20ml	20mm	Crimp	Yes	75mm	Round Bottom	100	5 X 100
VO10F12000S000	10ml	18mm	Screw	Yes	45mm	Flat Bottom	100	5 X 100
VO10R12000S000	10ml	18mm	Screw	Yes	45mm	Round Bottom	100	5 X 100
VO20F12000S000	20ml	18mm	Screw	Yes	75mm	Flat Bottom	100	5 X 100
VO20R12000S000	20ml	18mm	Screw	Yes	75mm	Round Bottom	100	5 X 100

Headspace Vial and Cap Kits

Product Code	Neck Dia	Volume	Type	Feature	Sets / pk	Case
VC20F120ASC041	20mm	20ml	Crimp	Flat Bottom - Ultra Clean	100	5 X 100
VC20F120MSC041	20mm	20ml	Crimp	Flat Bottom - Magnetic	100	5 X 100
VC20R120ASC041	20mm	20ml	Crimp	Round Bottom - Ultra Clean	100	5 X 100
VC20R120MSC041	20mm	20ml	Crimp	Round Bottom - Magnetic	100	5 X 100
VC10R120ASC041	20mm	10ml	Crimp	Round Bottom - Ultra Clean	100	5 X 100
VC10R120MSC041	20mm	10ml	Crimp	Round Bottom - Magnetic	100	5 X 100
VC10F120ASC041	20mm	10ml	Crimp	Flat Bottom - Ultra Clean	100	5 X 100
VC10F120MSC041	20mm	10ml	Crimp	Flat Bottom - Magnetic	100	5 X 100
VC10F120MSS061	18mm	10ml	Screw	Flat Bottom - Magnetic	100	5 X 100
VC20F120MSS061	18mm	20ml	Screw	Flat Bottom - Magnetic	100	5 X 100
VC10R120MSS061	18mm	10ml	Screw	Round Bottom - Magnetic	100	5 X 100
VC20R120MSS061	18mm	20ml	Screw	Round Bottom - Magnetic	100	5 X 100

Sample Vials & Closures

Caps for **Headspace Vials**

Colour	Cap MOC	Top	Septa Mount	Septa MOC	Feature
Silver	Aluminum	Open	Friction	Silicone PTFE	Ultra Clean



Product Code	Cap Dia	Cap MOC	Cap Type	Lining	Caps /pk	Case Qty
CS000020ASC041	20 mm	Aluminium	Crimp	PTFE	100	5 x 100
CS000020MSC041	20 mm	Magentic	Crimp	PTFE	100	5 x 100
CS000020MSS061	18 mm	Magentic	Screw	PTFE	100	5 x 100



Vials

Pre-Assembled Vial & Cap Kits



Screw Type / Top-Open

Product Code	Vol	Neck Dia mm	Vial Colour	Septa MOC	Lining Mount	Septa Height	Feature	Sets / pk	Case Qty
VC20C124PWS111	20ml	24	Clear	Silicone	PTFE	Bonded	Pre Assembled	72	1 X 72
VC30C124PWS111	30ml	24	Clear	Silicone	PTFE	Bonded	Pre Assembled	72	1 X 72
VC40C124PWS111	40ml	24	Clear	Silicone	PTFE	Bonded	Pre Assembled	72	1 X 72
VC60C124PWS111	60ml	24	Clear	Silicone	PTFE	Bonded	Pre Assembled	72	1 X 72
VC20A124PWS111	20ml	24	AMBER	Silicone	PTFE	Bonded	Pre Assembled	72	1 X 72
VC30A124PWS111	30ml	24	AMBER	Silicone	PTFE	Bonded	Pre Assembled	72	1 X 72
VC40A124PWS111	40ml	24	AMBER	Silicone	PTFE	Bonded	Pre Assembled	72	1 X 72
VC60A124PWS111	60ml	24	AMBER	Silicone	PTFE	Bonded	Pre Assembled	72	1 X 72
VC40C124POS111	40ml	24	Clear	Silicone	PTFE	Bonded	Pre Assembled & top cover	72	1 X 72

* Pre Assembled & top cover

OEM Services

Are you in the chromatography consumable business?

BOROSIL® can be your supplier for analytical vials.



Custom specification

Your Logo

Complete confidentiality

Timely supplies

Proven product

Your Logo

LOGO		
Certificate		
TEST	PARAMETERS	RESULTS
Class	TYPE I Borosilicate Glass	<input checked="" type="checkbox"/>
Dimensional	Total Weight	<input checked="" type="checkbox"/>
	Internal Neck Diameter	<input checked="" type="checkbox"/>
	External Thread Diameter	<input checked="" type="checkbox"/>
	Body Diameter	<input checked="" type="checkbox"/>
<small>BOROSIL LIMITED Borosil Vials are manufactured from Type I Borosilicate glass as per IS 1502 (ISO 159) standards. They are suitable for analytical and research use. Borosil samples are checked for cosmetic defects and finish. Date: _____ G.C. Approved: _____</small>		



Custom Packing



auditable processes

Microscope Slides & Cover Glasses

Conforms to ISO 8037 standard

- Fine ground edges slide are manufactured by state-of-art manufacturing process which results in a high quality and polished ground edges.
- Refractive index of 1.53 ± 0.02
- From extremely uniform, thin and flat glass sheets which are very resistant to corrosion and fogging.
- The slide is used for routine microscopy application.



9100 - MICROSCOPE SLIDES

- Made from the finest white glass
- Uniform quality
- High- Precision ground edges on all four sides
- Thin, Flat and resistant to corrosion or fogging
- Pre-cleaned and ready to use
- Subjected to strict quality control checks, examined individually and environmentally controlled dry before packaging
- Specially designed for meeting the stringent needs of users
- Free from all visual defects

9100P02 - PLAIN



9100D01 - DOUBLE FROSTED



Product Code	Description	Pack Size mm L x B x WT	Quantity Per Packet No.	Packets / Case
9100P02	Plain, Ground Edges	76 x 26 x 1	50	25
9100D01	Double Frosted, Ground Edges	76 X 26 X 1	50	25

L : Length x B : Breadth x WT : Wall Thickness



Individual Shrink Wrap to avoid fogging

9115 - COVER GLASS

- Made from the finest white glass with excellent quality
- Uniform quality
- Available in both square and rectangular shape
- Cover glass is cut, cleaned, sorted and weighed
- Resistance to corrosion and fogging
- Free from ragged edges, oily film and finger prints
- Packed in reclosable plastic boxes for protection during storage
- Pre cleaned and ready to use
- Subjected to strict quality control checks, examined individually and environmentally controlled to dry before packaging

9115S01 - SQUARE



9115S02 - SQUARE



9115S03 - SQUARE



Product Code	Description	Pack Size mm	Quantity Per Packet / Piece	Packets / Case
9115S01	Square	18 x 18	100	50
9115S02	Square	22 x 22	100	50
9115S03	Square	24 x 24	100	50

9115R01 - RECTANGULAR



9115R02 - RECTANGULAR



9115R03 - RECTANGULAR



Product Code	Description	Pack Size mm	Quantity Per Packet / Piece	Packets / Case
9115R01	Rectangular	22 x 40	100	50
9115R02	Rectangular	22 x 50	100	50
9115R03	Rectangular	22 x 60	100	50

BOROSIL®

Lab Accessories

Tongs



Clamp with PVC Coated Prong



Clamp



Clamp with Bosshead



Burette Clamp



Boss Head



Retort Ring & Test Tube Holder



Retort Base



Rod For Retort Base



Z Shape Test Tube Stand



Burner



Spatula



BOROSIL® Lab Accessories

TONGS FOR BEAKERS & FLASKS



- Made of stainless steel
- Used to handle hot beakers & flasks
- Provided with silicon sleeves or in fibre glass yarn to resist direct flame

Product Code	Description	Size Inches	Case Lot No.
LATG8888P10	Beaker tong	10	6
LATG8888B10	Beaker tong	12	6
LATG8888F10	Flask tong	10	6
new LATG8888F12	Flaks tong	12	6



TONGS FOR CRUCIBLE

- Made of Stainless Steel
- Used to handle hot crucibles

Product Code	Description	Size inches	Case Lot No.
LACT8888006	Crucible tong with bow stainless steel	6	6
LACT8888008	Crucible tong with bow stainless steel	8	6
new LACT8888010	Tong crucible, SS,		106
LACT8888012	Crucible tong with bow stainless steel	12	6



CLAMPS

- Available in Zinc & Aluminium diacasted
- It is coated with LEAD-FREE powder coating & fitted with brass screw which makes it totally RUST-FREE CLAMP
- Two & three finger clamp Jaws can be covered with PVC sleeves
- Two & four finger clamp has cork lined Jaws holds upto 90 mm articles
- It is provided with 8 mm diameter & 150 mm long Stainless Steel(Grade 201)rod

Product	Description	Case Lot No.
L AFC8888Z02	Two finger clamp, Zinc pressure die casted	10
L AFC8888AD3	Three finger clamp, Aluminum pressure die casted	10
L AFC8888ZD4	Four finger clamp, Zinc pressure die casted	10
L AFC8888AD4	Four finger clamp Aluminum pressure die casted	10

CLAMPS WITH BOSSHEAD

- Available in Zinc & Aluminium diecasted
- It is coated with LEAD-FREE powder coating & fitted with brass screw which makes it totally RUST-FREE CLAMP
- Two & three finger clamp Jaws can be covered with PVC sleeves
- Two & four finger clamp has cork lined Jaws holds upto 90 mm articles
- With adjustable bosshead attached clamp length can be vary, can be rotated 360° and locked at any angle

Product Code	Description	Case Lot No.
L AFC8888Z03	Two finger clamp (Zinc PDC) with adjustable bosshead	12
L AFC8888A03	Three finger clamp (Aluminium PDC) with adjustable bosshead	12
L AFC8888Z04	Four finger clamp (Zinc PDC) with adjustable bosshead	12
L AFC8888A04	Four finger clamp (Aluminium PDC) with adjustable bosshead	12



UNIVERSAL CLAMPS

- Single Burette / Test Tube Clamp made of stainless steel Jaws & Aluminium bosshead
- Round jaws are covered with PVC coating
- Opens from 15 mm to 45 mm in Diameter
- Clamps attaches to rods up to 13 mm in diameter. Threaded rod and wing nut adjust clamp angle and overall length from 13 cm to 15 cm

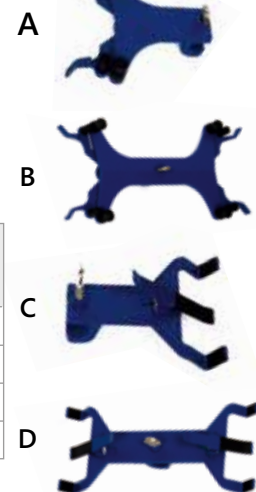
Product Code	Description	Case Lot No.
L ABC8888SC1	Single Burette clamp, PVC coated jaws stainless steel	12
L ABC8888S01	Single Burette clamp, PVC uncoated jaws, stainless steel	12

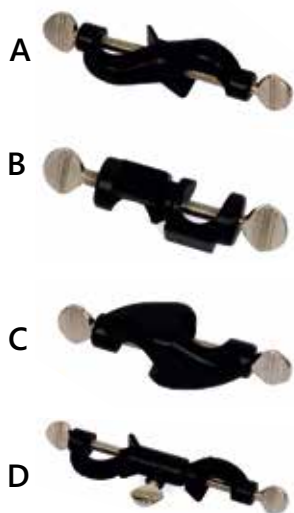


BURETTE CLAMPS

- Single / Double Burette clamp is made of Aluminium die casting
- Feature black PVC sleeves for firm gripping of burettes.
- This adjustable burette clamp is suitable for all burettes up to 100 ml which are held in place by the pressure created by the springs yet allows easy operation without damaging glassware.

Product Code	Description	Case Lot No.
L ABC8888B01	Single burette clamp, Aluminium PDC Fig. A	6
L ABC8888A02	Double burette clamp, Aluminium PDC Fig. B	6
L ABC8888AE1	Single burette clamp, Aluminium PDC (Eco.) Fig. C	6
L ABC8888AE2	Double burette clamp, Aluminium PDC (Eco.) Fig. D	6





BOSSHEDS

- Bosshead made of Zinc & Aluminum pressure die casted
- It can hold a rod upto 16 mm diameter at 90° angle and Swivel bosshead rotate at 360° angle
- It is coated with LEAD-FREE powder coating & fitted with Nickel plated thumb screw

Product Code	Description	Case Lot No.
LABH8888RBL	Regular bosshead Zinc PDC Fig. A	12
LABH8888OBL	Round bosshead Zinc PDC Fig. B	12
LABH8888JBL	Jumbo bosshead Aluminum PDC Fig C	12
LABH8888SBL	Swivel bosshead Zinc PDC Fig. D	12

RETORT RING

- Strong circular mild steel ring with 6 mm diameter stem
- Open bosshead fitted with thumb screw to accept rods from 8 mm to 15 mm diameter



Product Code	Description	Size in inches	Case Lot No.
LARR8888003	Retort Ring with bosshead	3	6
LARR8888004	Retort Ring with bosshead	4	6

RETORT BASE

- Superior Heavy duty steel alloy stand with rubber lining on a shorter side gives extra stability
- With lead-free powder coating



Product Code	Description	Size inches	Case Lot No.
LARB8888H06	Retort base, Heavy	6" x 4"	6
LARB8888H08	Retort base, Heavy	8" x 5"	6
LARB8888H10	Retort base, Heavy	10" x 6"	6

ROD FOR RETORT BASE

- With stainless steel Grade 201



Product Code	Description	Approx O.D. x Height mm	Case Lot No.
LARS8888500	Retort Rod (SS Grade 201)	12 x 500	2
LARS8888600	Retort Rod (SS Grade 201)	12 x 600	2
LARS8888750	Retort Rod (SS Grade 201)	12 x 750	2

TEST TUBE STAND

- It is made of Aluminum sheet, Z type, new design, single piece fabrication
- One row of holes of 30 mm diameter, the second row of holes of 25 mm diameter and third row of hole of 16 mm diameter
- This aluminium Z shape design is Coated with lead free powder coating make it corrosion resistant

Product Code	Description	Case Lot No.
LATS8888H19	Z' Shape Test Tube Stand, Aluminum, 19 hole assorted	6
LATS8888H25	'Z' Shape Test tube stand, 25 hole for 16mm tube	6



TEST TUBE HOLDER

- A pair of spring strip of hard rolled stainless steel, mounted in wooden handle in cross-scissor shape, and accepts tubes of diameter 12-43 mm.
- Overall length about 225mm

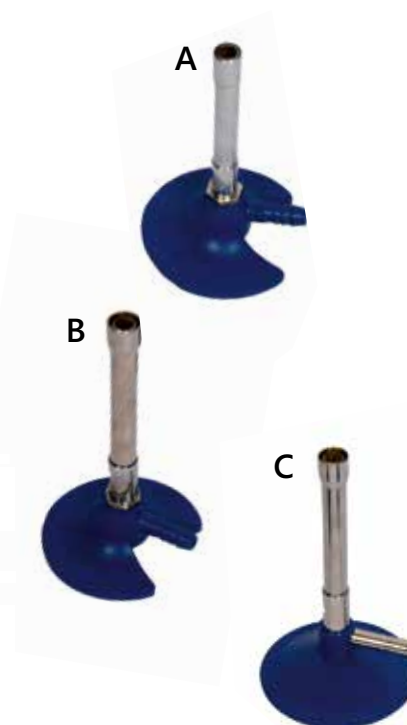
Product Code	Description	Case Lot No.
LATH8888000	Test tube holder, cross pattern, Stainless steel	24



BURNERS

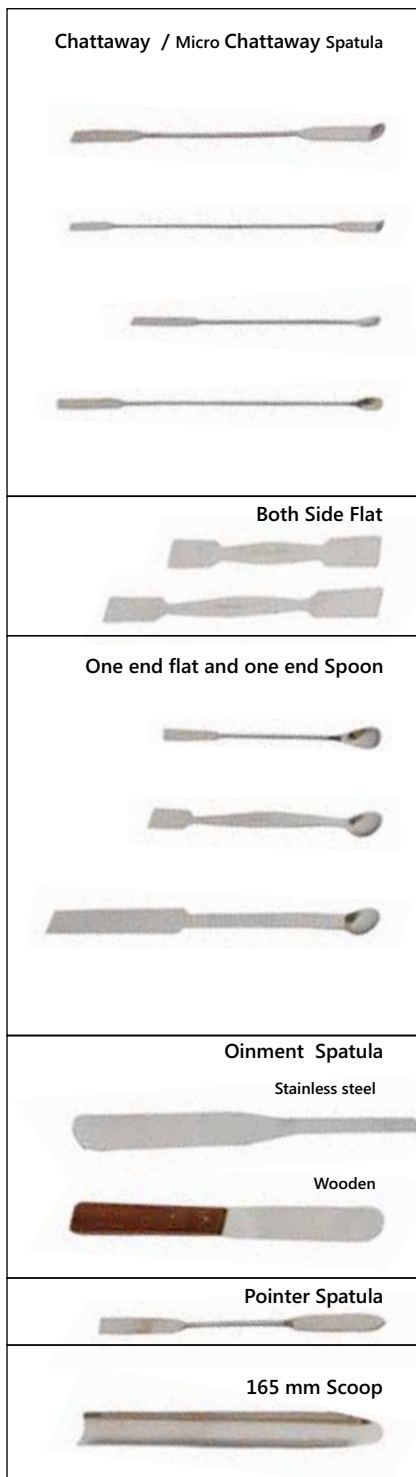
- Bunsen Burner 13mm/11mm ideal for use with natural gas and L.P.G.
- Nickel-plated brass burner tube with Rotatable air regulator
- Enamelled Zinc pressure die casted base
- Base diameter 80 mm

Product Code	Description	Caselot No.
LABR8888Z11	Bunsen burner, Zinc PDC base with 11mm brass pipe for L.P. G. Fig. A	2
LABR8888Z13	Bunsen burner, Zinc PDC base with 13mm brass pipe for L.P. G. Fig. B	2
LABR8888013	Burner, sheet metal base with 13mm pipe, for L.P. G. Fig. C	2



SPATULAS

- Made of stainless steel grade 202
- Spatulas are used for measuring solids moving objects and scraping material out of
- beakers



Product Code	Description	Size in inches	Case Lot No.
LACS8888006	Chattaway Spatula	6	20
LACS8888008	Chattaway Spatula	8	20
LASL8888C08	Micro Chattaway Spatula	8	20
LASC8888M06	Micro Scoop	6	10
LASC8888SM6	Semi Micro Spatula	6	10
LASL8888075	Big Spoon Spatula	7.5	10
LASL8888009	Big Spoon Spatula	9	10
LASP8888B06	Both side flat	6	20
LASP8888B08	Both side flat	8	20
LASP8888004	One end flat and one end Spoon	4	50
LASP8888006	One end flat and one end Spoon	6	50
LASP8888008	One end flat and one end Spoon	8	50
LASP8888010	One end flat and one end Spoon	10	50
LASP8888012	One end flat and one end Spoon	12	50
LASO8888W04	Ointment Spatula	4	10
LASO8888W06	Ointment Spatula Wooden Handle	6	10
LATG8888S06	Ointment Spatula Forged Stainless Steel	6	10
LASL8888P06	Pointer Spatula	6	10
LASC8888165	165 mm Scoop	6.5	10
LASL8888510	Big Spoon Spatula	10	10

* For products listed on the above table use HSN code 90189022

FORCEPS POINTED

Product Code	Description	Case Lot No.
LAFP8888004	Forceps, Pointed dissecting, 4"	10
LAFP8888005	Forceps, Pointed dissecting, 5"	10
LAFP8888006	Forceps, Pointed dissecting, 6"	10

new



FORCEPS PTFE POINTED

Product Code	Description	Case Lot No.
LAFPP8888004	Forceps, PTFE, Pointed end, 4"	10
LAFPP8888006	Forceps, PTFE, Pointed end, 6"	10

new



FORCEPS BLUNT DISSECTING

Product Code	Description	Case Lot No.
LAFB8888005	Forceps, Blunt dissecting, 5"	10
LAFB8888006	Forceps, Blunt dissecting, 6"	10
LAFB8888008	Forceps, Blunt dissecting, 8"	10

new



FORCEPS PTFE BLUNT

Product Code	Description	Case Lot No.
LAFBP8888004	Forceps, PTFE, Blunt end, 4"	10
LAFBP8888006	Forceps, PTFE, Blunt end, 6"	10

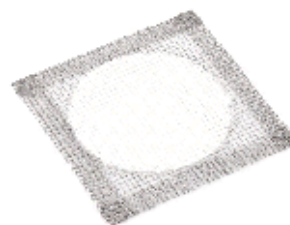
new



WIRE GAUGE

Product Code	Description	Case Lot No.
LAWG8888C06	Wire Gauge with Ceramic center 5" x 5"	10
LAWG8888C05	Wire Gauge with Ceramic center 6" x 6"	10

new



TRIANGULAR TRIPOD

Product Code	Description	Case Lot No.
LATT8888200	Triangular Tripod, SS, 200 x 125 mm	2

new



LABQUEST BY BOROSIL®

Manufacturers of Laboratory Equipment



LabQuest by Borosil are products that meet Borosil's high standards of reliability, performance and value.

All products are backed by Borosil's robust service and after sale support.

SMART • RUGGED • PRACTICAL



KJELDAHL DIGESTION

Kjeldahl Digestion Systems for highly reproducible results for nitrogen estimation by Kjeldahl method

- ? High grade aluminum block for uniform heating
- ? Dripping tray that offers protection to digester body
- ? Easy convenient connection to Fume Scrubber
- ? Perfect fit of manifolds to the tube for optimum safety



Model Name	KBD200	KBD061	KIR060	KIR020
Type	Block Digester		Infrared Digester	
No. of positions	20	6	6	2
Tube capacity (ml)	250			
Temperature Controller	Yes			
Element Temperature	700°C			
Time Setting LCD Display	Yes			
Body	Stainless Steel			
Current Consumption	12A	6A	12A	4A
Dimensions (W x D x H)	(410 x 585 x 735) mm	(414 X 450 X 665)mm	(580 x 390 x 665)mm	(330 X 360 X 665)mm
Power Consumption	2800W	1300W	2400W	800W
HSN Code	84790000	84198990	84190000	84190000
Ordering Code	BLFAKBD20000000000	BLFAKBD06100000000	BLFAKIR06000000000	BLFAKIR02000000000

ACCESSORIES

Product Code	Description	Pack Size
BLAAFUTKBD06100000	KBD061 Fume Extractor	1
BLAAFUT100PTFE1651	Teflon fume cap	1
BLAAFUTKBD0610Y00A	KBD061 Y Connector	1
BLAAFUT20019220001	Block Digester Fume Extractor	1
BLAAFUTKBD2000T00A	KBD200 T- CONNECTOR	1
BLGATTQ01041250000	Quartz Test Tube 40OD 300H 50-7CLR	2
BLMATTB01041250000	Borosilicate Test Tube 40OD 300H 50-7CLR	5
BLAAFUT06019220001	KIR060 Fume Extractor	1
BLAAFUT02012080001	KIR020 Fume Extractor	1
BLA0VRT10D0014DBLK	Viton Rubber Tube -10 mm IDx14 mm OD	100 Mtr
BLFATHW06100000000	6 Position Cooling Station 2X3 for KBD061	1
BLFATHW20000000000	20 Position Cooling Station 5X4 for KBD200	1
BLFATHW06200000000	6 Position Cooling Station INLINE for KIR060	1
BLFATHW02000000000	2 Position Cooling Station INLINE KIR020	1

FUME SCRUBBER

A byproduct of digestion is the sulfur dioxide fumes that cause environmental pollution and probable health hazards if disposed of ineffectively. The need for a fume hood can be nullified by the fume scrubber system by Borosil.

Hazardous fumes are exhausted from the digester by a common exhaust manifold. The scrubber helps neutralizing toxic fumes by its 3 stage mechanism

- ? Stage 1 : Neutralization by distilled water
- ? Stage 2 : Neutralization by Alkali
- ? Stage 3 : Neutralization by carbon filter

Dynamic fume scrubber practically ensures complete removal of fumes and a safe working environment. Made from Teflon coated neoprene rubber and Teflon valve diaphragm enhances the life of the unit even after repeated fume attacks. Inbuilt sound damping foam to minimize noise during operation. Easy compatibility with all digesters



Model Name	KSC010
Current Consumption	1A
Pump delivery Rate	28 Ltr/Min
Dimensions (WxDxH)	445 x 375x 460 mm
Ordering Code	BLFAKSC0100000000
HSN Code	84141000

ACCESSORIES

Product Code	Description	Pack Size
BLMAFUTV2KSCCD2932	Condenser V2	1
BLM0BGW25012200211	Carbon Bottole	1
On request	Submersible pump	1
On request	Water tank	1

KJELDAHL DISTILLATION

Kjeldahl Distillation Systems for highly reproducible results for nitrogen estimation by Kjeldahl method

- ? Borosilicate glass assembly along with the SS steam generator
- ? Process kill switch to halt the process in case of accidental door opening
- ? Detachable bottom drip tray for extra protection against acid attack
- ? Single encoder push button to control all automatic functions
- ? Anytime alkali addition during the distillation cycle
- ? Tube sensor that enables safe operating conditions in event of tube damage
- ? Reagent refill level sensor to avert reagent dry out.



Feature/ Model	KDI010	KDI030	KDI040
Steam addition	Automatic	Automatic	Automatic
Distilled water addition	Manual	Automatic	Automatic
Alkali addition	Manual	Automatic	Automatic
Boric acid addition	Manual	Manual	Automatic
Input for 20 sample processing	Yes	NA	NA
LCD display	Yes		
Tube Capacity (ml)	250 ml		
Steam power (Adjustable)	25% to 100%		
Maximum distillation Time (mins)	20	20	20
Reagent level sensor	NA	Yes	Yes
Anytime alkali addition	Yes	Yes	Yes
Tube error detection	Yes	Yes	Yes
Door close sensor	Yes	Yes	Yes
Process resume from stop	Yes	Yes	Yes
User editable programs	NA	50	50
Upgradable to print readout	Yes	Yes	Yes
Current Consumption	5.5 A	6.5 A	6.5 A
Power consumption	1000 W	1000 W	1000 W
Dimension (L X B X H)	(380 x 350 x 725) mm	(650 x 350 x 725) mm	(650 x 350 x 725) mm
HSN Code	84790000		
Ordering Code	BLFAKDI01000000000	BLFAKDI03000000000	BLFAKDI04000000000

ACCESSORIES

Code	Description	Pack Size
BLA0TUB000PTFE1008	PTFE Tube - 10mm OD X 08mm ID	10 Mtr
BLA0CNT1030PWRC06A	Mains Power Cord 6Amp - 3 Mtrs	1
BLA0KNB010032D006D	Potentiometer Knob 32mm OD 6mm ID	1
BLA0DOH000KJDLDIST	Kjeldahl Distillation Dosing Head	1
BLM0CON110KJDLDIST	Condenser	1
BLA0DOF075COCKBARB	Kjeldahl DistIn Dosing Funnel-75ml	1
BLA0TTC000KJDLGL14	Threaded Tube Connector - GL14	1
BLM0DHH1100KDI00V4	Dosing Head Holder	1
BLA0TTC000KJDLGL18	Threaded Tube Connector - GL18	1
BLA0STT4D00006TRNP	Silicon Tube-4 mm IDx06 mmOD	50 Mtr
BLA0JCNPP00000005L	PP Jerry Can	1
BLA0FS000210550KDI	KDI030/040 Rgnt Bottle Float Sensor	1
On Request	Removal Bottom Tray	1
On Request	Heat Resistant Gloves	1
On Request	Water Toner	1



Block Digester



Fume Scrubber



Cooling Station



Distillation

WATER BATHS

- Seamless stainless steel pan
- In built water level sensor
- Non corrosive Rings
- Two point calibration



WBC010 & WBS010



WBC020 & WBS020



WBC050 & WBS050

STILL WATER BATH

Model	WBC010	WBC020	WBC050	WBC012
Nominal capacity	1 L	2 L	5 L	12 L
Working Temperature range	Ambient +5°C to 99°C			
Temperature stability	±0.2°C			
Interior dimensions (W x D x H)	(170X160X100) mm	(264X162X100) mm	(325X264X150) mm	(528X325X150) mm
Exterior dimensions* (W x D x H)	(191X247X222) mm	(279X248X251) mm	(341X351X312) mm	(546X412X320) mm
Electrical Requirements	1 A		3 A	6 A
Power Consumption	100 W	175 W	550 W	1100 W
Supplied With Concentric Rings Lid	1 Position	2 Position	4 Position	8 Position
HSN Code	84198990			
Ordering Information	BLFHWC01000000000	BLFHWC02000000000	BLFHWC05000000000	BLFHWC01200000000

CIRCULATING WATER BATH

Model	WBS010	WBS020	WBS050	WBS012
Nominal capacity	1 L	2 L	5 L	12 L
Working Temperature range	Ambient +5°C to 99°C			
Temperature stability	±0.2°C			
Interior dimensions (W x D x H)	(170X160X100) mm	(264X162X100) mm	(325X264X150) mm	(528X325X150) mm
Exterior dimensions* (W x D x H)	(191X247X222) mm	(279X248X251) mm	(341X351X312) mm	(546X412X320) mm
Electrical Requirements	1 A		3 A	6 A
Power Consumption	100 W	175 W	550 W	1100 W
Supplied With Concentric Rings Lid	1 Position	2 Position	4 Position	8 Position
HSN Code	84198990			
Ordering Information	BLFHWS01000000000	BLFHWS02000000000	BLFHWS05000000000	BLFHWS01200000000

HIGH CAPACITY CIRCULATING WATER BATH

Model	WBS024	WBS035 ¹	WBS060 ¹
Nominal capacity	24 L	35 L	60 L
Working Temperature range	Ambient +5°C to 99°C		
Temperature stability	±0.2°C	±0.2°C	±0.2°C
Interior dimensions (W x D x H)	(530 x 325 x 200) mm	(650 x 530 x150) mm	(650X530X200) mm
Exterior dimensions* (W x D x H)	(560 x 360 x 300) mm	(660 x 618 x 420) mm	(660X618X470) mm
Electrical Requirements	10 A		13 A
Power Consumption	2200 W	2200 W	2900 W
Supplied With Concentric Rings Lid	8 Position	SS Hinged Canopy	
HSN Code	84198990		
Ordering Information	BLFHWS02400000000	BLFHWS03500000000	BLFHWS06000000000

¹ - With SS 316 Tubular Heater

STAINLESS STEEL CIRCULATING WATER BATH

- Seamless stainless steel pan & exterior body
- In built water level sensor
- Non corrosive Rings
- Two point calibration



WBP080



WBP012

Model	WBP080	WBP012
Nominal capacity	8 L	12 L
Working Temperature range	Ambient +5°C to 99°C	
Temperature stability	±0.2°C	
Interior dimensions (W x D x H)	(325 X 264 X 200) mm	(528 X 325 X 150) mm
Exterior dimensions* (W x D x H)	(341 X 351 X 312) mm	(546 X 412 X 320) mm
Electrical Requirements	3 A	6 A
Power Consumption	550 W	1100 W
Suppled With Concentric Rings Lid	4 Position	8 Position
HSN Code	84198990	
Ordering Information	BLFHWBP08000000000	BLFHWBP01200000000

SEROLOGICAL WATER BATH

- Special design for incubation cells & serum culture sample
- 200 mm additional water tank height
- Seamless stainless steel Pan
- In built water level sensor



WBS05S

Model	WBS05S
Nominal capacity	5 L
Working Temperature range	Ambient +5°C to 99°C
Temperature stability	±0.2°C
Interior dimensions (W x D x H)	(325X264X200) mm
Exterior dimensions* (W x D x H)	(341X351X362) mm
Electrical Requirements	3 A
Power Consumption	550 W
Supplied with lid	Polycarbonate lid
HSN Code	84198990
Ordering Information	BLFHWBS05S00000000

CYLINDRICAL WATER CUM OIL BATH

- Easy and quick attachment of glass apparatus
- Applications in distillation, extraction and reflux reactions
- Simultaneous media and sample stirring
- Two point calibration



WBR011

Model	WBR020	WBR050	WBR011
Flask Capacity	1 L to 2 L	3 L to 5 L	6 L to 10 L
Nominal capacity	7.5 L	14.5 L	32 L
Working Temperature range for Water Bath	Ambient +5°C to 99°C with 0.1°C increments		
Temperature stability Water Bath	±0.2°C		
Working Temperature range for Oil Bath	Ambient +5°C to 240°C with 0.1°C increments		
Temperature stability Oil Bath	±1°C		
Flask Position	1	1	1
Exterior dimensions* (W x D x H)	(320 x 367 x 332) mm	(378 X 425 X 378) mm	(435 X 480 X 455) mm
Electrical Requirements	2.5 A	4 A	7 A
Power Consumption	500 W	800 W	1500 W
Supplied With Lid	Circular Covering Lids		
HSN Code	84198990		
Ordering Information	BLFHWR02000000000	BLFHWR05000000000	BLFHWR01100000000

OIL BATH / CIRCULATING OIL BATH

- S.S body construction
- 4 digit 7 segment LED display for displaying temperature and time
- External probe is used for better temperature accuracy
- S.S perforated tray for holding flasks
- Easy cleaning inside the cylinder body after heating of oil



OMC250 & OMS250



OMC010 & OMS010

Model	OMC250	OMC010	OMS250	OMS010
Nominal capacity	750 ml	3057 ml	750 ml	3057 ml
Working Temperature range	Ambient +5°C to 240°C			
Temperature stability	±1°C			
Interior dimensions (W x D x H)	(108 x 84) mm	(182 x 142) mm	(108 x 84) mm	(182 x 142) mm
Exterior dimensions* (W x D x H)	(203 x 169 x 206) mm	(273 x 240 x 263) mm	(203 x 169 x 206) mm	(273 x 240 x 263)mm
Electrical Requirements	1.5 A	3.5 A	1.5 A	4 A
Power Consumption	300 W	800 W	320 W	820 W
Suppled With Concentric Rings Lid	1 Position			
HSN Code	84198990			
Ordering Information	BLFHOMC25000000000	BLFHOMC01000000000	BLFHOMS25000000000	BLFHOMS01000000000

ACCESSORIES



BLMHWBA0120000008



BLMHWBA020CAPP000



BLMWBA012CAP0PC00

Order No.	Product Discription	HSN Code	Pack of
Water Bath - 1 L			
BLMHWBA0100000001	SS LID with Glass Nylon Concentric Rings-01 Hole for 1 lit Water Bath	84198990	1
BLMHWBA010CAPP000	Polycarbonate Moulded Lid for 1 lit Water Bath	84198990	1
Water Bath - 2 L			
BLMHWBA0200000002	SS LID with Glass Nylon Concentric Rings-02 Holes for 2 lit Water Bath	84198990	1
BLMHWBA020CAPP000	Polycarbonate Moulded Lid for 2 lit Water Bath	84198990	1
Water Bath - 5 L			
BLMHWBA0500000004	SS LID with Glass Nylon Concentric Rings- 04 Holes for 5 lit Water Bath	84198990	1
BLMHWBA0500000006	SS LID with Glass Nylon Concentric Rings- 06 Holes for 5 lit Water Bath	84198990	1
BLMHWBA050CAPP000	Polycarbonate Moulded Lid for 5 lit Water Bath	84198990	1
Water Bath - 12 L & 24 L			
BLMHWBA0120000008	SS LID with Glass Nylon Concentric Rings-08 Holes for 12 lit & 24 lit Water Bath	84198990	1
BLMHWBA0120000012	SS LID with Glass Nylon Concentric Rings-12 Holes for 12 lit & 24 lit Water Bath	84198990	1
BLMHWBA012CAPP000	Polycarbonate Moulded Lid for 12 lit & 24 lit Water Bath	84198990	1

Gen2 Heating Mantles

- Digital energy regulator with 10 step power regulation
- Automatic spill detection and safety shutdown



GME010

Model	GME250	GME500	GME010
Flask Capacity	250 ml	500 ml	1 L
Flask Diameter	85 mm	105 mm	135 mm
Exterior dimensions* (W x D x H)	(310 x 330 x 160) mm		
Working Temperature range	Ambient +5°C to 420°C		
Display	LED Display with energy setting from 0-9		
Electrical Requirements	1 A	1 A	1.5 A
Power Consumption	150 W	200 W	300 W
HSN Code	84198990		
Ordering information	BLFHGME25000000000	BLFHGME50000000000	BLFHGME01000000000

Product carries no warranty. Supplied with two additional heating coil

Gen2 Precision Heating Mantles

- Digital energy regulator with 10 step power regulation
- Automatic spill detection and safety shutdown
- In built precision temperature control and energy regulator mode.
- Supplied with 2 nos of exchange coils



GMC010

Model	GMC250	GMC500	GMC010
Flask Capacity	250 ml	500 ml	1 L
Flask Diameter	85 mm	105 mm	135 mm
Exterior dimensions* (W x D x H)	(310 x 330 x 160) mm		
Working Temperature range	Ambient +5°C to 420°C		
Display	LED Display with time, temperature & process status		
Temperature Accuracy	±1.0°C		
Timer	0-999 Minutes		
Electrical Requirements	1 A	1 A	1.5 A
Power Consumption	150 W	200 W	300 W
HSN Code	84198990		
Ordering information	BLFHGMC25000000000	BLFHGMC50000000000	BLFHGMC01000000000

Product carries no warranty. Supplied with two additional heating coil

HEATING MANTLES

- Energy regulator for adjustment of temperature
- Thermally insulated, electrically grounded and powder coated metal body
- Stainless steel top plate for corrosion resistant handling
- Quick clamp feature for easy heating element replacement



HME050

Model	HME010	HME020	HME030	HME050	HME011
Flask Capacity	1 L	2 L	3 L	5 L	10 L
Flask Diameter	131 mm	166 mm	199 mm	255 mm	279 mm
Working Temperature range	Ambient +5°C to 420°C				
Display	LED indication with energy setting			LED indication with energy Setting from 0-9	
Exterior dimensions (W x D x H)	(355 x 265 x 136) mm			(430 x 335 x 170) mm	((450 x 603 x 215) mm
Electrical Requirements	1.5 A	2 A		3 A	6 A
Power Consumption	300 W	450 W		600 W	1200 W
HSN Code	84198990				
Ordering Information	BLFHHME01000000000	BLFHHME02000000000	BLFHHME03000000000	BLFHHME05000000000	BLFHHME01100000000

PRECISION HEATING MANTLES

- Temperature accuracy of $\pm 1^\circ\text{C}$ with auto cut off
- Thermally insulated, electrically grounded and powder coated metal body
- Stainless steel top plate for corrosion resistant handling
- Quick clamp feature for easy heating element replacement



HMC010

Model	HMC010	HMC020	HMC030	HMC050
Flask Capacity	1 L	2 L	3 L	5 L
Flask Diameter	131 mm	166 mm	199 mm	255 mm
Working Temperature range	Ambient +5°C to 420°C			
Display	LED Display with time, temperature & process status			
Temperature Accuracy	$\pm 1.0^\circ\text{C}$			
Timer	0-999 Minutes			
Exterior dimensions* (W x D x H)	(263 x 355 x 136) mm			(430 x 335 x 170) mm
Electrical Requirements	1.5 A	2.5 A		3 A
Power Consumption	300 W	450 W		600 W
HSN Code	84198990			
Ordering Information	BLFHMC01000000000	BLFHMC02000000000	BLFHMC03000000000	BLFHMC05000000000

STIRRING MANTLE

- **Energy & Speed** control
- Thermally insulated, electrically grounded and powder coated metal body
- Stainless steel top plate for corrosion resistant handling
- Quick clamp feature for easy heating element replacement



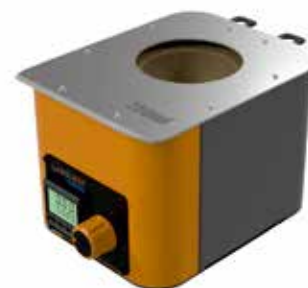
RMA010

Model	RMA250	RMA500	RMA010	RMA020
Flask Capacity	250 ml	500 ml	1L	2 L
Flask Diameter	85 mm	105mm	131mm	166 mm
Working Temperature range	Ambient +5°C to 450°C			
Display	LED indication for process status			
Speed	200-2200 rpm			
Exterior dimensions (W x D x H)	(225X170X150) mm		(265 x 335 x 200) mm	
Electrical Requirements	1 A		2 A	
Power Consumption	150 W	200 W	300 W	450 W
HSN Code	84198990			
Ordering information	BLFHRMA25000000000	BLFHRMA50000000000	BLFHRMA01000000000	BLFHPRM02000000000

3 L , 5 L , 10 L available on request

PRECISION STIRRING MANTLE

- **Energy & Speed** regulator for temperature control
- Thermally insulated, electrically grounded and powder coated metal body
- Stainless steel top plate for corrosion resistant handling
- Quick clamp feature for easy heating element replacement



PRM250

Model	PRM250	PRM500	PRM010	PRM020
Flask Capacity	250 ml	500 ml	1L	2 L
Flask Diameter	85 mm	105 mm	131mm	166 mm
Working Temperature range	Ambient +5°C to 450°C			
Display	LED Display with temperature & process status			
Temperature Accuracy	±1.0°C			
Speed	200-2200 rpm			
Exterior dimensions (W x D x H)	(225 x 170 x 150) mm		(265 x 335 x 200) mm	
Electrical Requirements	1A		2A	
Power Consumption	150 W	200 W	300 W	450 W
HSN Code	84198990			
Ordering information	BLFHPRM25000000000	BLFHPRM50000000000	BLFHPRM01000000000	BLFHPRM02000000000

3 L , 5 L , 10 L available on request

MAGNETIC HOT PLATE STIRRER

- Temperature range upto 200 degree Celsius
- Maximum Stirring Capacity upto 2L
- Speed Range 100 - 1500 rpm
- Temperature accuracy $\pm 1^{\circ}\text{C}$



Model	HLS200
Stirring Position	One
Max Capacity	2 L
Temperature Range	Ambient +5°C to 300°C
Temperature Accuracy	$\pm 1^{\circ}\text{C}$
Temperature Control	PID and Digital Energy Regulator
Liquid Temperature	85°C for water
Supplied with External Probe	PT 100
Speed Range	100 to 1500 rpm
Set up Plate Diameter	150 x 150 mm
Set up Plate	SS Top Plate
Dimensions (LxWxH)	260 x 190 x 155 (in mm)
Protection Class	IP21
HSN Code	84798200
Ordering Information	BLFHLS20000000000

ACCESSORIES

Product Code	Description
BLA0DIN00MX0005PIN*	PT100 DIN Connector

* Supplied with unit

MAGNETIC HOT PLATE STIRRER

- Temperature range upto 320°C
- Maximum Stirring Capacity upto 5L
- Motor type BLDC motor
- Upgradeable USB for print



Model	HPS050	HPS051
Stirring Position	One	
Max Capacity	5 L	
Temperature Range	Ambient +5°C to 320°C	
Temperature Accuracy	±1°C	
Plate Temperature	upto 320°C	
Temperature Control	PID	
Liquid Temperature	96°C - 99°C for water	
Supplied with External Probe	PT 100 with stand	
Max Speed	1500 rpm	
Motor Type	BLDC MOTOR	
Display Timer	0-999 min	
Set up Plate Diameter	135 mm	
Set up Plate	SS 304 Top Plate	Ceramic Coated Top Plate
Dimensions (LxWxH)	(270x200x100) mm	
Protection Class	IP21	
Heater Power	550W	
HSN Code	90278090	
Ordering Information	BLFHPS0500000000	BLFHPS0510000000

ACCESSORIES

Product Code	Description
BLA0DIN00MX0005PIN*	Pt100 DIN Connector

* Supplied with unit

MAGNETIC HOT PLATE STIRRER

The nano crystalline ceramic glass-top provides excellent resistance to thermal shock and corrosive liquids. The elevated design, protects the unit from spillages. Best in class capacity and speed of 20 lit and 2200 rpm. The unit comes with slip detection that can recover the stir bar in the event of it being lost outside the magnetic field.

The target temperature can be achieved in rapid or gradual or accurate modes depending upon the application. The unit can also be programmed to meet custom temperature and time conditions.



Model	MHPS 350	MHPS 550
Max capacity in lit		20
Max speed (rpm)		2200
Temp range (from ambient)	350°C	550°C
Plate Temperature	280°C	450°C
Liquid Temperature	180°C	280°C
Stirring positions		One
Set up plate		Ceramic
Protection class		IP21
Dimension (W X D X H)		220 x 330 x 115
HSN Code		84198990
Set up plate in mm		180 x 180
Display		Digital
HSN Code		84198990
Ordering Information	BLFACTR00500000000	BLFACTR00900000000

ACCESSORIES

Product Code	Description
100MHPS01PT100*	PT 1000
100MHPS01PS000*	Probe Stand

* Supplied with unit

MULTI POSITION STIRRERS

Multi position stirrers with slip-less speed regulation, homogenous temperature distribution and brushless motor for maintenance free operation.

The closed design allows for easy cleaning, safety and protection against spillage.



Model	MHPS 5P	MHPS 10P	MHPS 15P	MS 5 - 2 L
Stirring positions	5	10	15	5
Max Speed (rpm)	1500			2200
Speed range in rpm	digital			
Motor type	10			
Max capacity in lit	2	4	6	10
Temp range (from ambient)	120°C			NA
Dimension (W X D X H)	(562 x 136 x 75) mm	(568 x 196 x 75) mm	(568 x 282 x 76) mm	(594 x 332 x 45) mm
Set up plate	(456 x 118) mm	(460 x 178) mm	(460 x 264) mm	(573 x 305) mm
Pulse mode	Yes			
Ordering Information (with heating)	100MHPS0515000	100MHPS1015000	100MHPS1515000	NA
Ordering Information (without heating)	100MS000515000	100MS001015000	100MS001515000	100MS000522000

INDUSTRIAL MAGNETIC STIRRERS

- Stainless steel body
- Stirring capacity upto 200 Lit
- Speed range 0-1000 rpm
- USB output to printer (optional)



MGS020



MGS050



MGS200

Model	MGS020	MGS050	MGS200
Number of stirring positions	1		
Stirring quantity	Upto 20 L	Upto 50 L	Upto 200 L
Motor Type	BLDC 15 MOTOR	BLDC 30 MOTOR	
Stirring bar length	35 - 80 (in mm)	80 - 120 (in mm)	155 (in mm)
Material Housing	304 Stainless steel		
Display	Digital LCD Display		
Speed range	0 - 1000 rpm		0 - 600 rpm
Timer	(0 - 99:99 hrs:min) or continuous/infinite operation		
Set-up plate dimensions	(300 x 300) mm	(400 x 400) mm	(500 x 500) mm
Dimensions (W x D x H)	(300 x 390 x 110) mm	(400 x 490 x 110) mm	(500 x 590 x 110) mm
Weight of the Product	12 Kg	14 Kg	25 Kg
Weight/load (it can Sustain)	30 Kg	70 Kg	200 Kg
Ramp rate	Adjustable for different viscosity		
Safety temperature	External probe for recording and monitoring sample temperature and safety limit		
USB Interface (Upgradable)	YES - Option to connect LABQUEST data logger & printer		
Permissible temperature	Ambient to 40 °C		
Max Current	0.3 A	0.5 A	
Motor rating output	15 W	30 W	
HSN Code	90278090		
Ordering Code	BLFHMG02000000000	BLFHMG05000000000	BLFHMG20000000000

MAGNETIC STIRRER

- Maximum Stirring Capacity upto 2L
- Speed Range 100 - 1500 rpm



Model	MGS001
Stirring Position	One
Max Capacity	2 L
Speed	0-2000rpm
Display	LED Display
Plate Material	SS304
Plate Dimension in mm	(189 x 208) mm
Unit External Dimensions (W x D x H)	(284 x 188 x 120) mm
Timer	0-999 min
Current Consumption	1 A
Power Consumption	24 W
HSN Code	90278090
Ordering Information	BLFHMGS00100000000

MOTORLESS MAGNETIC STIRRERS

Truly maintenance free with no moving parts. Ultra thin design just 12mm thick. The SS top surface provides protection against damage due to spillage.



MS ONE

MS FOUR

Model	MS One	MS Four
Max Speed (rpm)	1500	1200
Increment speed (from 15 rpm)	50	50
Display		digital
Max load (ml)	800	250 x 4
Magnetic bar length (mm)		25
Pulse		Yes
Dimension (W X D X H)	(156 x 110 x 13.2) mm	(457 x 126 x 13.4) mm
Protection class		IP64
Stirring Position	One	Four
HSN Code		84198990
Ordering Information	100MS000115000	100MS000412000

DRY BATH

- Anodised Aluminium Block
- Digital LED display
- Uv Resistant Top Cover
- Rotary Knob For Ease of Operation



Model	LBH010
Temperature Range	Ambient +5°C to 150°C
Temperature Accuracy	±1°C
Timer	0-999 min
Temperature Control	PID and Digital Energy Regulator
Block Capacity	2,5 ml x 8, 1,5 ml X 8, 0.5 ml X 8
Unit External Dimensions (WxDxH)	285X190X156 (in mm)
Cover For DryBlock	UV protection
Power consumptions	200 W
Current Consumption	2.5 A
HSN Code	84198990
Ordering Information	BLFHLBH01000000000

ACCESSORIES - Magnetic Stir Bar

Product Code	Description	Recommended For	Pack Size
100MSA0BL08025	Accessory Stir Bar D: 8mm X 25mm	Motorless stirrers, Multi position stirrers, MHPS350/ MHPS550	10 pcs
100MSA0BL08035	Accessory Stir Bar D: 8mm X 35mm	MHPS350/ MHPS550	10 pcs
100MSA0BL12050	Accessory Stir Bar D: 12mm X 50mm	MHPS350/ MHPS550	10 pcs
100MSA0BL13060	Accessory Stir Bar D: 13mm X 60mm	MHPS350/ MHPS550	1 pc
100MSA0BL14080	Accessory Stir Bar D: 14mmX 80mm	MS 50	1 pc
100MSA0BL16100	Accessory Stir Bar D: 16mm X 100mm	MS 200	1 pc

VORTEX MIXER

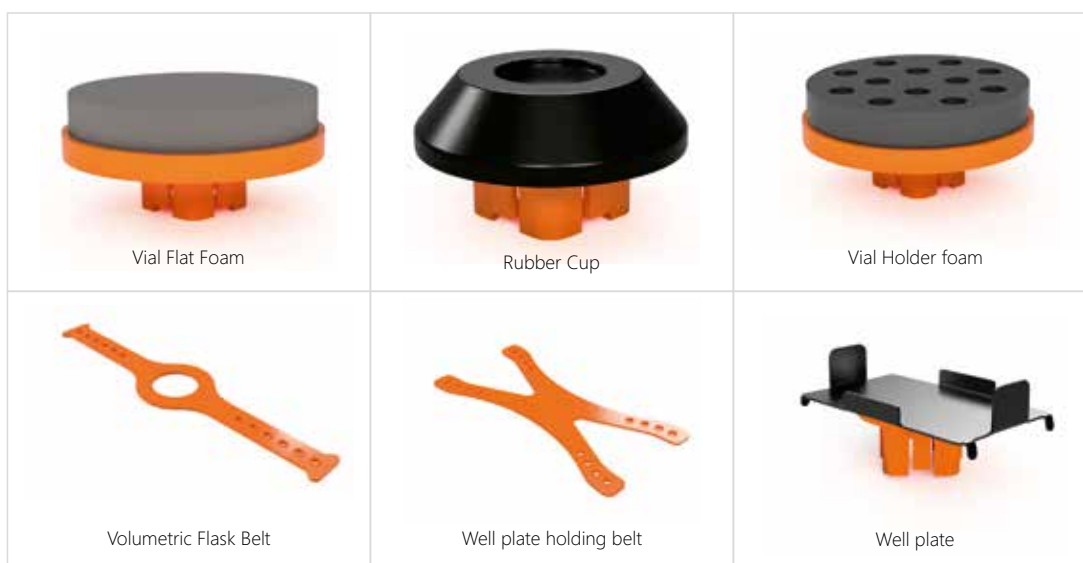
- Touch & Continuous Mode
- Overload & Over Current Protection
- AC Motor For Quick Acceleration & Low Maintenance
- Easy Recognition of Mixing Mode With In build LED Lamp



BHRMI 1.0

BHRMI 2.0

Model	BHRMI 1.0	BHRMI 2.0
Speed	200 to 2800 rpm	
Orbital diameter	4 mm	
Operational mode	Touch, Stand-by & Continuous mode	
Timer Setting	0 -999 min	
Display	NA	LED with rpm & time
Feet	Four suction cups	
Unit External Dimension (W x D x H)	(132x160 x180) mm	
Power consumptions	250 W	350 W
Current consumption	1 A	1.5 A
HSN Code	84798200	
Ordering Information	BLFHVMX01000000000	BLFHVMX02000000000



ACCESSORIES BHRMI 1.0 / 2.0

Product Code	BHRMI 1.0	BHRMI 2.0	Order Description
BLMHVX01040000010	√	√	VMX rubber cup
BLMHVX01042000011	√	√	VMX EVA flat foam
BLMHVX01010000017	√	√	VMX EVA flat head holder
BLMHVX01000000011	√	√	EVA Vial Holder foam
BLMHVX01000000012		√	Volumetric Flask Base foam
BLMHVX02000000011		√	25, 50, 100 ml Vol. Flask hold_belt
BLMHVX02060000010		√	VMX 96 Well Plate
BLMHVX02060000012		√	Silicon 96 well plate holding belt

MULTI TUBE VORTEXER

LabQuest multi tube vortexer produces powerful vortex action with inbuilt counter balance for stable and silent operation.

The multi tube vortexer comes with digital display, programmable pulse mode, compatible with 7ml / 15ml / 50 ml multi tubes and 250 ml conical flask.



Model	VMMT
Max Speed (rpm)	300 - 2500
Timer	1-999 mins & infinite
Motion Type	Clockwise and Counter clockwise motion
Pulse Mode	280°C
Display	Digital
Motor Type	BLDC
Protection class	IP 21
Weight	18 kg
Power Consumption	75 W
HSN Code	84798200
Ordering Information	100VMMT6025000

ACCESSORIES

Product Code	Description
100VMMA600700T*	Accessories for Multi Vortex for 60 Tube
100VMMA451500T*	Accessories for Multi Vortex for 45 Tube (15 ml)
100VMMA185000T*	Accessories for Multi Vortex for 18 Tube (50 ml)
100VMMA062500F*	Accessories for Multi Vortex for 6 Flask (250 ml)

* Supplied with unit

LABWARE DRYER

- Optimum air circulation that dries labware in less than 15 mins
- Perfectly dried labware for error free experiments
- Benchtop and Wall mountable unit
- Assorted stainless steel easy to clean Pegs
- Heater (ON / OFF) feature for drying plasticware



Model	GDS010
Number of Pegs	22
Peg Sizes (Volume compatibility)	
16 mm	12 Nos
10mm	10 Nos
Temperature Range (°C)	Ambient to 70°C
Time Control	Yes
Drying Power	1075 W
Dimension(W x D x H)	(400 x 367 x 620) mm
HSN Code	84798200
Ordering information	BLFGGDS0100000000

Product Code	Description	HSN Code	Nos Pcs
BLPGGDS01000000010	Pegs For Volumetric Adapter -10ID	39260000	10
BLPGGDS01000000016	Pegs For Volumetric Adapter-16ID	39260000	12

MICRO CENTRIFUGE

LabQuest micro centrifuges are engineered for advanced aerodynamics to ensure low heat generation due to air friction and low noise operation.

Safety features include imbalance detection with auto cut-off. Electronic brake for auto stop on lid opening. Rotor and adaptors are supplied as standard accessories.



Model	MCF08VT	HMCF12VT
Rotor position	8	12
Tube capacity in ml	1.5 / 2.0 / 0.2 / 0.5	
Max speed (rpm)	6000	15000
RCF	2000	15596
Display	Digital	
Noise level	< 55db	< 60db
Imbalance detection	No	Yes
Dimension (W X D X H)	(162 x 157 x 116) mm	(260 x 244 x 205) mm
Weight	1.1 Kg	4 kg
Product Code	100MCF00800VT0	100HMCF1200VT0

CLINICAL CENTRIFUGE

Centrifuges for clinical applications are designed to accommodate rotors and centrifuge tubes of varied sizes.

The CCF 4000VT is designed to accommodate both a swing out rotor for improved separation as well as a 16 position rotor for high throughput while still remaining compact.

The DCF06VT provides a modern but economical centrifuge for basic clinical separations.



Model	DCF06VT	CCF4000VT	CCF4000VT
Rotor position	Fixed angle	Swing-out	Fix
Tube capacity in ml	5 / 7 / 9 / 15 x 6 Tubes	10 x 8 Tubes	15 x 8 Tubes
Max speed (rpm)	6500	4000	4000
Lid lock safety	Yes		
Liquid Temperature	Digital		
Stirring positions	Yes		
Dimension (W X D X H)	(260 x 244 x 205) mm	(415 x 355 x 173) mm	(415 x 355 x 173) mm
HSN Code	84198990	84198990	84198990
Ordering Information	100DCF00600VT0	100CCF00800VT0	On request

ACCESSORIES

Product Code	Description
100CCFA0610MLS*	Rotor for CCF 8 swing, 10ml x 6
100CCFA0815MLF	Rotor for CCF 8 fix, 15ml x 8
100CCFA1610MLF	Rotor for CCF 8 fix, 10ml x 16

* Supplied with unit

SHAKERS

7500S / PL FOUR / 3D -S / 1500 S

Shakers produce true linear or orbital motion using brush less dc motors.

Digital display and soft touch control panel interface for fatigue free convenience.

Microprocessor control allows for custom programming of speed and time.

The platform shaker 7500S can handle a mass of 7.5 kg.



Model	7500S	15000S	Four	3D-S
Type of movement	Orbital / Linear		Orbital	Rocking / Tumbling 7°
Orbital diameter in mm	10	30, 40, 40, 60, 70	4	-
Speed range in rpm	50-500	30 - 300	100-1200	10-80
Motor type	BLDC			
Display	digital			
Run time	0-99 hrs and 0-60min	Upto 99hours 59 mins	1-999 min and infinite	
Dimensions (WXDXH)	(350 x 408 x 105) mm	(825 x 625 x 165) mm	(343 x 195 x 88) mm	(307 x 267) mm (for plate)
HSN Code	84798200			
Ordering Information	100S0000075000	100S0000150000	100PL000400000	1003DS0000080R

ACCESSORIES

Shaker 7.5Kg

Product Code	Description
100S00009UPB75 *	Universal platform with adjustable bars (Flask capacity 9 x 250ml, 6 x 500 ml)
100S02509BPP75	Base plate with 9 plastic clamps : 9 x 250 ml
100S05009BPP75	Base plate with 9 plastic clamps : 9 x 500 ml
100S01009BPS75	Base plate with 9 Stainless steel clamps : 9 x 100 ml
100S02509BPS75	Base plate with 9 Stainless steel clamps : 9 x 250 ml
100S05009BPS75	Base plate with 9 Stainless steel clamps : 9 x 500 ml
100S01001SSC00	Stainless steel Clamp for 100 ml flask
100S01501SSC00	Stainless steel Clamp for 150 ml flask
100S02501SSC00	Stainless steel Clamp for 250 ml flask
100S05001SSC00	Stainless steel Clamp for 500 ml flask
100S10001SSC00	Stainless steel Clamp for 1000 ml flask
100S00000FA075	Funnel Attachment

Shaker 15 Kg

Product Code	Description
100S00UP150000*	Shakers 15 kg Universal Platform for 44 x 100 ml, 36 x 250 ml, 25 x 500 ml, 13 x 1000 ml
100S0BPC150015	Shaker 15Kg Base Plate for Plastic Clamps for 24 x 250ml, 24 x 500ml,
100S02501PC015	Shaker 15Kg Plastic Clamp 1 No 250ml
100S05001PC015	Shaker 15Kg Plastic Clamp 1 No 500ml
100S0BSC250015	Shaker 15Kg Base Plate for SS Clamps 24 x 100ml, 24 x 150 ml, 24 x 250 ml,
100S01001SC015	Shaker 15Kg SS clamp 1 No 100ml,
100S01501SC015	Shaker 15Kg SS clamp 1 No 150ml,
100S02501SC015	Shaker 15Kg SS clamp 1 No 250ml,
100S0BSC100015	Shaker 15Kg Base Plate for SS Clamps 24 x 500 ml, 8 x 1000 ml
100S05001SC015	Shaker 15Kg SS clamp 1 No 500 ml
100S10001SC015	Shaker 15Kg SS clamp 1 No 1000 ml

***Supplied with Unit**

CHILLER

- Temperature range from -20°C to +100°C
- Ergonomic and compact design allows the instruments to be on desk at eye-level
- Large, bright LED display with reliable microprocessor PID temperature control
- Economic and environmental friendly operation
- Simple operation and navigation menu



CTR 175



CTR 500

Model	CTR 175	CTR 500	CTR101
Tank capacity	5 L	7.5 L	10 L
Tank size (L x W x D)	(325x176x150) mm	(325x265x150) mm	(325x265x200) mm
Cooling capacity	175 W	500 W	1000 W
Pump flow rate		12.5 LPM	
Heater capacity (Watt)		2000 W	
Display		LED	
Temperature stability		± 0.03 °C	
Temperature range	-20 to 100°C	-10 to 100°C	-10 to 100°C
HSN Code		84198990	
Ordering Information	BLFPCTR17500000000	BLFPCTR50000000000	BLFPCTR10000000000

ACCESSORIES

Product Code	CTR 005
BLA0STT4D00006TRNP	Silicon Tube : 4 mm ID x 06 mm OD
BLA0STT8D00012TRNP	Silicon Tube : 8 mm ID x 12 mm OD
BLA0TUB100SILC1014	Silicon Tube : 10 mm ID x 14 mm OD
BLA0VRT8D00012DBLK	Viton Rubber Tube : 8 mm ID x 12 mm OD
BLA0VRT10D0014DBLK	Viton Rubber Tube : 10 mm ID x 14 mm OD
BLA0PIPPVC0HOS00CB	Clear Braided PVC Hose Pipe

Vacuum Pump - Oil Free

- Prevent the need of lubricant or regular oil changes
- Enhancing pump life with filter cartridge air inlet to filter
- Vacuum regulator to adjust pump vacuum.
- Auto shut off when overheated



Ordering Information

Model	BORO - 017
Max. Vacuum	100 mbar
Max. flow rate	17 L / min
Motor rotation	1450 rpm
Port thread	9 mm
Noise level	50 dB
Weight	4.4 kg
Dimension (W x D X H)	(272 x 142 x 165) mm
Electrical Requirement	0.3 A
Power Consumption	60 W
HSN Code	84798200
Ordering Information	100VP300017

Caution :

Please do not use this vacuum pump with any corrosive chemicals such as Acid, Alkali & Organic Air. Avoid any material or liquid sucked down into the pump that will cause serious damage.

***Supplied with Unit**

TUBE ROLLER

TR - 4 / TR - 10

Tube rollers are offered to meet the budgets and applications of all labs. Rollers can be easily mounted or removed without any tools.

Rollers can also be adjusted to accommodate tubes of different diameters.



Ordering Information

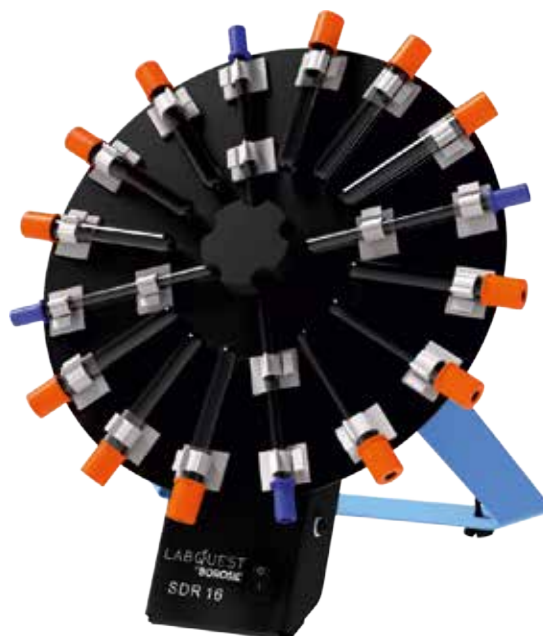
Specification	TR - 4	TR - 10
Number of tubes (in ml)	9 x 5	27 x 7
Motion	Rocking & Rolling	Rocking & Rolling
Motor	AC	BLDC
Speed	fixed	variable
rpm	30	10 to 80
Timer	NA	Yes
Pulse mode	NA	Yes
Protection Class	IP 21	IP 21
Dimension (W X D X H) in mm	475 x 210 x 80	502 x 448 x 92.5
Product Code	100R0000415000	100R0001020000

* TR - 4 & TR - 10 Available till stock last.

TUBE DISC ROTATORS

SDR 16

The SDR 16 is functional tube rotator which is robust and compact. The fixed speed of 30 rpm and the gentle circular motion generated is ideal for effective mixing in blood collection tubes.



Ordering Information

Specification	SDR 16
Tube Capacity	16x10ml or Blood tube
Speed	Fixed
rpm	30
Time in min	Infinite
Motor	AC
Protection Class	IP 21
Pulse mode	NO
Dimension	278 x 183 x 252
Cat Code	100CTR0160030R

* Available till stock last.

***Supplied with Unit**

LABQUEST BY BOROSIL®

SMART • RUGGED • PRACTICAL

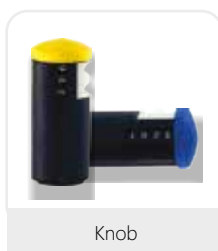
- High precision Micro-pipette
- Unique, flexible volume selection mechanism
- Universally compatible tip cone
- All metal mechanism
- Bottle Top Dispensers with re-circulation



C1 THE HIGH PRECISION MICROPIPETTE

FULLY AUTOCLAVABLE

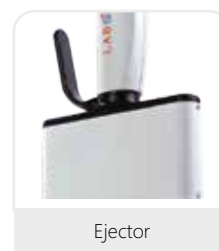
- Silicone o-ring for optimal tip seal
- Robust design includes metal tip base
- Low operating thumb force



Knob



'O' ring



Ejector

C1 SINGLE CHANNEL FIXED VOL PIPETTE,

Calibration & Accuracy As Per ISO 8655

Product Code	Volume Range (µl)	Inaccuracy (%)	Imprecision
LHC17111001	1	2.5	1.8
LHC17111002	2	2.5	1.8
LHC17111005	5	1.2	0.8
LHC17111006	10	1	0.5
LHC17111008	20	1	0.3
LHC17111009	25	0.8	0.35
LHC17111010	30	1.16	0.4
LHC17111012	50	1	0.3
LHC17111016	100	0.7	0.2
LHC17111020	200	0.6	0.2
LHC17111021	250	2	0.6
LHC17111024	500	0.8	0.15
LHC17111029	1000	0.8	0.2
LHC17111030	2000	1.2	0.3
LHC17111033	5000	0.6	0.15
LHC17111038	10000	0.6	0.15



C1 Single Channel Variable Vol Pipette

Calibration & Accuracy As Per ISO 8655

Product Code	Volume Range (µl)	Volume Increment (µl)	Inaccuracy (%)	Imprecision
LHC17112002	0.2-2	0.02	12.00/2.0	06.00/1.00
LHC17112005	0.5-10	0.1	2.50/1.0	01.80/0.50
LHC17112008	2-20	0.2	5.00/1.00	1.50/0.30
LHC17112016	5-50	0.5	2.00/1.00	1.20/0.30
LHC17112020	10-100	1	2.50/0.70	1.00/0.20
LHC17112024	20-200	2	2.50/0.60	0.70/0.20
LHC17112029	100-1000	2	2.00/0.80	0.60/0.20
LHC17112033	1000-5000	10	1.20/0.60	0.30/0.15
LHC17112038	1000-10000	50	1.20/0.60	0.30/0.15

Convert fixed volume pipette to a variable volume pipette

C1 Micropipettes come with detachable pre calibrated volume knobs. Cut costs while increasing the accuracy of your experiments.

Product	Description	Qty / Pk
On Request	C1 Fixed Vol Knob	1
On Request	C1 Variable Vol Knob	1

C1 THE HIGH PRECISION MICROPIPETETTE

FULLY AUTOCLAVABLE

C1 Pipette 8 Channel

Calibration & Accuracy As Per ISO 8655

Product Code	Volume Range (μ l)	Volume Increment (μ l)	Inaccuracy (%)	Imprecision
LHC17113001	0.5-10	0.1	5.00/2.00	3.60/1.00
LHC17113002	2-20	0.2	5.00/2.00	3.60/1.00
LHC17113009	5-50	0.5	3.20/1.40	1.60/0.60
LHC17113016	10-100	1	2.50/1.30	1.20/0.50
LHC17113020	20-200	2	1.80/1.20	0.80/0.40
LHC17113022	30-300*	2	1.66/1.40	0.60/0.30z

* 30-300 μ l available in two knobs : 30 - 200 μ l & 125 - 300 μ l



C1 PIPETTE 12 CHANNEL

Calibration & Accuracy As Per ISO 8655

Product Code	Volume Range (μ l)	Volume Increment (μ l)	Inaccuracy (%)	Imprecision
LHC17114001	0.5-10	0.1	5.00/2.00	3.60/1.00
LHC17114002	2-20	0.2	5.00/2.00	3.60/1.00
LHC17114009	5-50	0.5	3.20/1.40	1.60/0.60
LHC17114016	10-100	1	2.50/1.30	1.20/0.50
LHC17114020	20-200	2	1.80/1.20	0.80/0.40
LHC17114022	30-300*	2	1.66/1.40	0.60/0.30

* 30-300 μ l available in two knobs : 30 - 200 μ l & 125 - 300 μ l



FULLY AUTOCLAVABLE



C3 Single Channel Fixed Vol Pipette , Calibration & Accuracy As Per ISO 8655

Product Code	Volume Range (µl)	Inaccuracy (%)	Imprecision
LHC37111001	1	2.5	1.8
LHC37111002	2	2.5	1.2
LHC37111005	5	1.2	0.8
LHC37111006	10	1	0.5
LHC37111008	20	1	0.3
LHC37111009	25	0.8	0.35
LHC37111010	30	1.16	0.4
LHC37111012	50	1	0.3
LHC37111016	100	0.7	0.2
LHC37111020	200	0.6	0.2
LHC37111021	250	0.4	0.2
LHC37111024	500	0.8	0.15
LHC37111029	1000	0.8	0.2
LHC37111033	5000	0.6	0.15
LHC37111038	10000	0.6	0.15



Precision Click



Easy to read dial



Soft Plunger Light weight

C3 Single Channel Variable Vol Pipette, Calibration & Accuracy As Per ISO 8655

Product Code	Volume Range (µl)	Volume Increment (µl)	Inaccuracy (%)	Imprecision
LHC37112002	0.2-2	0.01	12.00/2.00	6.00/1.00
LHC37112005	0.5-10	0.1	2.50/1.00	1.80/0.50
LHC37112008	2-20	0.1	5.00/1.00	1.50/0.30
LHC37112016	5-50	0.5	2.00/1.00	1.20/0.30
LHC37112020	10-100	0.5	2.50/0.70	1.00/0.20
LHC37112024	20-200	1	2.50/0.60	0.70/0.20
LHC37112029	100-1000	5	2.00/0.80	0.60/0.20
LHC37112033	500-5000	50	1.20/0.60	0.30/0.15
LHC37112038	1000-10000	100	3.00/0.60	0.60/0.15

FULLY AUTOCLAVABLE

Product	Volume Code (µl)	Volume Increment (µl)	Test Volume Range	Inaccuracy (µl)	Imprecision (%)
LHC17022042	0.5-10	0.01	1	2.5	1.8
			5	2	1
			10	1	0.6
LHC17022012	5 - 100	0.1	10	3	1
			50	1	0.5
			100	0.8	0.2
LHC17022008	10 - 200	0.1	20	2.5	0.7
			100	0.7	0.3
			200	0.6	0.2
LHC17022024	50 - 1000	1	100	3	0.6
			500	1	0.4
			1000	0.6	0.2
LHC17022016	250 - 5000	5	500	2.4	0.6
			2500	1.7	0.25
			5000	0.6	0.15



CE ELECTRONIC PIPETTE 8 CHANNEL, Calibration and Accuracy As per ISO 8655

Product Code	Volume Range (µl)	Volume Increment (µl)
LHC17023001	0.5-10	0.01
LHC17023002	2-20	0.01
LHC17023016	5-100	0.1
LHC17023020	10-200	0.1
LHC17023022	15-300	0.1

CE ELECTRONIC PIPETTE 12 CHANNEL, Calibration and Accuracy As per ISO 8655

Product Code	Volume Range (µl)	Volume Increment (µl)
LHC17024001	0.5-10	0.01
LHC17024002	2-20	0.01
LHC17024016	5-100	0.1
LHC17024020	10-200	0.1
LHC17024022	15-300	0.1



FAST PIPETTE

Pipette Controller

C1 Pipette filling device

Product Code	Description
LHC17005011	Pipette filling device





2011 - Bottle Top Dispensers Research Model - Fully Autoclavable, Calibration And Accuracy As Per ISO 8655

Product	Vol. Range (ml)	Increment (ml)	Accuracy		CV	
			± %	± ml	± %	± ml
LH002011002	0.25 - 2.5	0.05	0.6	0.012	0.2	0.004
LH002011005	0.5 - 5.0	0.10	0.6	0.030	0.2	0.010
LH002011016	1.0 - 10.0	0.20	0.6	0.060	0.2	0.020
LH002011020	2.5 - 30.0	0.50	0.6	0.180	0.2	0.060
LH002011040	5.0 - 60.0	1.00	0.6	0.360	0.2	0.120
LH002011100	10.0 - 100.0	2.00	0.5	0.500	0.1	0.100

Dispensers come with 20mm, 32mm, 36mm, 40mm & 45mm bottle neck adapters.



2012 - Bottle Top Dispensers Pinnacle Model - with Re-circulation Valve, Calibration And Accuracy As Per ISO 8655

Product	Vol. Range (ml)	Increment (ml)	Accuracy		CV	
			± %	± ml	± %	± ml
LH002012002	0.25 - 2.5	0.05	0.6	0.015	0.2	0.005
LH002012005	0.5 - 5.0	0.10	0.5	0.025	0.1	0.005
LH002012016	1.0 - 10.0	0.20	0.5	0.050	0.1	0.010
LH002012020	2.5 - 30.0	0.50	0.5	0.150	0.1	0.030
LH002012040	5.0 - 60.0	1.00	0.5	0.300	0.1	0.060
LH002012100	10.0 - 100.0	2.00	0.5	0.500	0.1	0.100

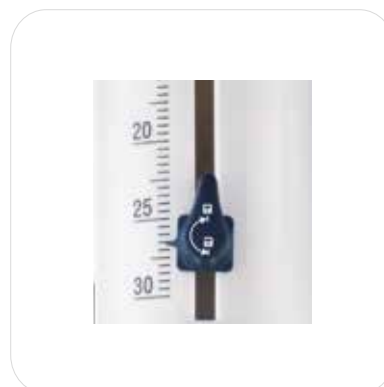
Dispensers come with 20mm, 32mm, 36mm, 40mm & 45mm bottle neck adapters.



2013 - Bottle Top Dispenser Ultimus - With Dual Valve Technology Calibration and Accuracy As Per ISO 8655

Product (ml)	Capacity
LH002013002	0.25 - 2.5
LH002013005	0.5 - 5.0
LH002013016	1.0 - 10.0
LH002013020	2.5 - 30.0
LH002013040	5.0 - 60.0
LH002013100	10.0 - 100.0

Dispensers come with 28mm, 30mm, 32mm, 36mm, 40mm & 45mm bottle neck adapters.



2011 - Bottle Top Dispenser Accessories

Product Code	Description
LH002011S01	Set of 5 Adapters 28 / 32 / 36 / 40 / 45 mm - BTDR - ADPT
LH002011S02	Telescopic Tube Common For All Sizes- BTDR - IT
LH002011S03	Volume Adjustment Knob For 2.5 / 5 / 10 ml Dispenser - BTDR - VAK - I
LH002011S04	Volume Adjustment Knob For 30 / 60 / 100 ml Dispenser - BTDR - VAK - II
LH002011S05	Delivery Nozzle With PTFE Screw Adapter And FEP Tubing For 2.5 / 5 / 10 ml Dispenser BTDR - DN - I
LH002011S06	Delivery Nozzle With PTFE Screw Adapter And FEP Tubing For 30 / 60 / 100 ml Dispenser - BTDR - DN - II
LH002011S07	Delivery Tube Cover With Nozzel Cap Common For All Sizes - BTDR - DTC



Work Accurately with 3 Calibrated Pre-set Speeds

Digital Burette can be flexibly operated at 3 Calibrated Pre-set Speeds, including dropwise dispensing, to achieve accurate end points.



Dispense Easily with Borosil Digital Burette

Borosil Digital Burette is an adjustable delivery nozzle. It offers a high degree of flexibility in both the horizontal and vertical directions, facilitating easy dispensing in demanding laboratory conditions.



Operate Smoothly with Motor Control

Motor controlled piston movement facilitates correct and comfortable titrations. It eliminates the errors associated with manual wheel controlled piston movement.



Perform Quick Titrations with TFT Touchscreen

A user-friendly TFT Touchscreen guides quick and displays numeric data up to the second decimal. Keep the Stylus pressed against it to perform dispensing and lift it to stop at once.



Re-direct Reagents with Recirculation Mode

Recirculation Mode prevents the loss of reagents during purging by re-directing them into the mounted bottle and facilitates bubble-free dispensing.



Enhanced Functionality with a Robust Control Panel

The instrument comes with a powerful Control Panel. Use it to perform functions like automatically refill without changing the reading, perform a zero reset (via Tare), switch the instrument off, etc.

DIGITAL BURETTE

- Choose from Three Unique Capacities**
 Digital Burette's are available in three unique capacities of 10 ml, 25 ml and 50 ml.
** Refer to the specifications and ordering Information.*
- Save Results on the Go**
 The instrument can store up to 20 results in its memory. It also offers the option to connect to a computer and save the readings on a software for future references.
- Micro USB Cable**
 The instrument can be connected to a computer with the help of a micro USB cable which is included in the Burette kit.
- Borosil Digital Burette's Control Panel** uses rechargeable, long lasting end replacement batteries

Work with a Modern Accessory Range that Enhances User Experience



Stylus

BOROSIL E-BURETTE comes with a sleek hand-held Stylus that assists in performing touch operations on the control panel with ease.



Amber Coloured Window

The instrument transparent acrylic window can be swapped with an amber coloured window for use with chemicals / reagents that are sensitive to light.



Adapters

The instrument's comes with five adapters that comfortably fit most laboratory reagent bottles. The available sizes are of 28 mm, 32 mm, 36 mm, 40 mm and 45 mm.



Telescoping Inlet Tube

A Telescoping Tube that can be adjusted in length according to a variety of bottle sizes, is provided as an inside-the-box accessory

SPECIFICATIONS AND ORDERING INFORMATION

Model No.	Capacity (ml)	Increment	Accuracy		CV	
			±%	±ml	±%	±ml
LH002014006	10	0.0005 ml	0.2	0.02	0.07	0.007
LH002014009	25	0.01 ml	0.2	0.05	0.07	0.0175
LH002014012	50	0.01 ml	0.2	0.1	0.07	0.035

Premium Micro Pipette Tips

- Certified DNase, RNase and Pyrogen Free
- Free of PCR inhibitors, lubricants and heavy metals
- Produced from special diamond polish mould using medical grade virgin polypropylene which provides very high transparency
- With graduations for visual control of liquid transfer
- Available in both standard as well as low retention
- With no secondary treatment and with no silicone additives for low retention
- With special PE filters for prevention of aerosols and contamination
- Specifically configured to fit major Pipette Brands available worldwide

Filter tip features can be selected as per permutation of

- Sterile
- Non sterile
- Low retention
- Filter

FILTER TIPS

BOROSIL filter tips are manufactured using specifically developed Polyethylene filters to block aerosols from entering into the pipette.

This helps in prevention of cross contamination.

Ideal for use in applications like sequencing, DNA amplification, Tissue culture, RT-PCR and other critical protocols.

LOW RETENTION TIPS

BOROSIL low retention tips are manufactured from a specific resin in combination with high quality diamond finish moulds to give super hydrophobic internal surface. This results in tips having minimum retention with maximum accuracy.

Further since no silicone treatment is given, there is absolutely no leaching effect.



UNIVERSAL GRADUATED TIPS



Universal Graduated Tips Bulk Pack

Product Code	Short Code	Tip Vol μ l	Special Feature	Selling Unit
BGT0000010B000	BGT-10B	10		1000 tips/ pack
BGT0000010XLB0	BGT-10XLB	10	Long	1000 tips/ pack
BGT0000200B000	BGT-200B	200		1000 tips/ pack
BGT000200BC000	BGT-200BC	200	Yellow	1000 tips/ pack
BGT0001000B000	BGT-1000B	1000		1000 tips/ pack
BGT001000BC000	BGT-1000BC	1000	Blue	1000 tips/ pack
BGT001000XLB00	BGT-1000XLB	1000	Long	500 tips/ pack
BGT0C10005000B	BGT-C10005	5000	Only C1	100 tips/ pack
BGT0C30005000B	BGT-C30005	5000	Only C3	100 tips/ pack
BGT0C10010000B	BGT-C10010	10000	Only C1	100 tips/ pack
BGT0C30010000B	BGT-C30010	10000	Only C3	100 tips/

pack

Universal Graduated Tips Bulk Pack Sterile

Product Code	Short Code	Tip Vol μ l	Special Feature	Selling Unit
BGT000010SB000	BGT-10SB10	10		1000 tips/ pack
BGT000010XLSB0	BGT-10XLSB	10	Long	1000 tips/ pack
BGT000200SB000	BGT-200SB	200		1000 tips/ pack
BGT001000SB000	BGT-1000SB	1000		1000 tips/ pack
BGT001000XLSB0	BGT-1000XLSB	1000	Long	500 tips/ pack

Universal Graduated Tips Bulk Pack Sterile Low Retention

Product Code	Short Code	Tip Vol μ l	Special Feature	Selling Unit
BGT00010SLB000	BGT-10SLB10	10		1000 tips/ pack
BGT00010XLSLB0	BGT-10XLSLB	10	Long	1000 tips/ pack
BGT00200SLB000	BGT-200SLB200	200		1000 tips/ pack
BGT01000SLB000	BGT-1000SLB	1000		1000 tips/ pack
BGT01000XLSLB0	BGT-1000XLSLB	1000	Long	500 tips/ pack

Universal Graduated Tip Racks

Product Code	Short Code	Tip Vol μ l	Special Feature	Selling Unit
BGT0000010R000	BGT-10R10	10		10 X 96 Tips/rack
BGT0000010XLR0	BGT-10XLR	10	Long	10 X 96 Tips/rack
BGT0000200R000	BGT-200R	200		10 X 96 Tips/rack
BGT0001000R000	BGT-1000R	1000		6 X 96 Tips/ rack
BGT0001000XLR0	BGT-1000XLR	1000	Long	6 X 96 Tips/ rack

Universal Graduated Tip Racks Sterile

Product Code	Short Code	Tip Vol μ l	Special Feature	Selling Unit
BGT000010SR000	BGT-10SR10	10		10 X 96 Tips/rack
BGT0010XLSR000	BGT-10XLSR	10	Long	10 X 96 Tips/rack
BGT000200SR000	BGT-200SR	200		10 X 96 Tips/rack
BGT001000SR000	BGT-1000SR	1000		6 X 96 Tips/ rack
BGT001000XLSRO	BGT-1000XLSR	1000	Long	6 X 96 Tips/ rack

UNIVERSAL GRADUATED TIPS

Universal Graduated Tip Racks Sterile Low Retention

Product Code	Short Code	Tip Vol μ l	Special Feature	Selling Unit
BGT00010SLR000	BGT-10SLR	10		10 X 96 Tips/rack
BGT00010XLSLRO	BGT-10XSLR	10	Long	10 X 96 Tips/rack
BGT00200SLR000	BGT-200SLR	200		10 X 96 Tips/rack
BGT01000SLR000	BGT-1000SLR	1000		6 X 96 Tips/ rack
BGT01000XLSLRO	BGT-1000XSLR	1000	Long	6 X 96 Tips/ rack

Universal Graduated Tip Reload Stack

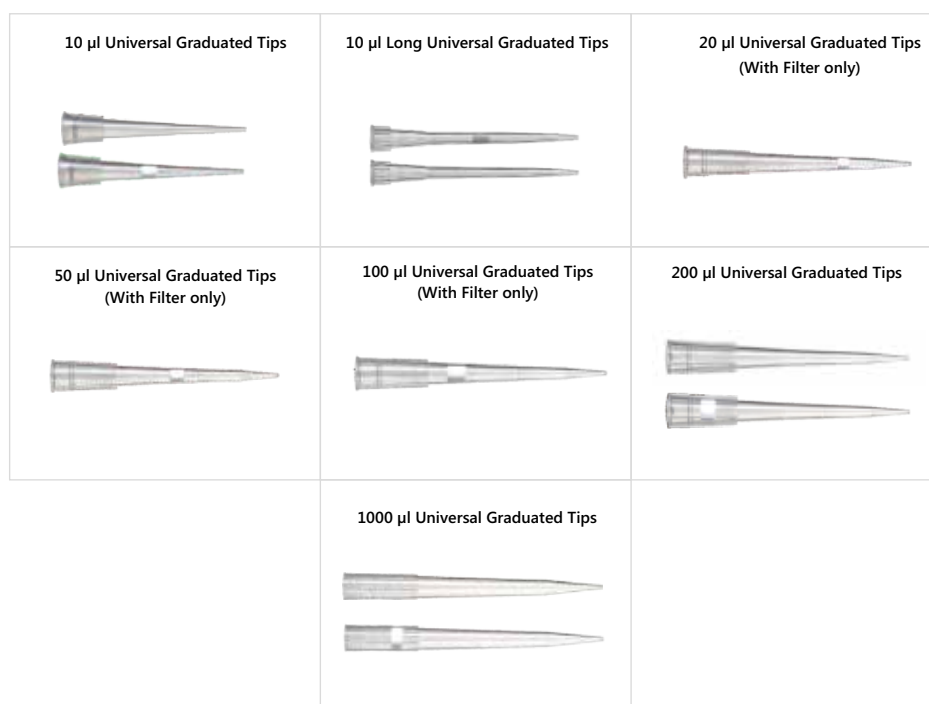
Product Code	Short Code	Tip Vol μ l	Special Feature	Selling Unit
BGT0000010Z000	BGT-10Z	10		10 X 96 tips / rack
BGT0000200Z000	BGT-200Z	200		10 X 96 tips / rack
BGT0001000Z000	BGT-1000Z	1000		5 X 96 tips / rack

Universal Graduated Tip Reload Stack Sterile

Product Code	Short Code	Tip Vol μ l	Special Feature	Selling Unit
BGT000010SZ000	BGT-10SZ	10		10 X 96 tips / rack
BGT000200SZ000	BGT-200SZ	200		10 X 96 tips / rack
BGT001000SZ000	BGT-1000SZ	1000		5 x 96 tips/ rack

Universal Graduated Tip Reload Stack Sterile Low Retention

Product Code	Short Code	Tip Vol μ l	Special Feature	Selling Unit
BGT00010SLZ000	BGT-10SLZ	10		10 X 96 tips / rack
BGT00200SLZ000	BGT-200SLZ	200		10 X 96 tips / rack
BGT01000SLZ000	BGT-1000SLZ	1000		5 x 96 tips/ rack



UNIVERSAL GRADUATED FILTER TIPS



Universal Graduated Filter Tips Bulk Pack

Product Code	Short Code	Tip Vol μ l	Special Feature	Selling Unit
BGT000010FB000	BGT-10FB	10		1000 tips/ pack
BGT000010XLFBO	BGT-10XFB	10	Long	1000 tips/ pack
BGT000020FB000	BGT-20FB	20		1000 tips/ pack
BGT000050FB000	BGT-50FB	50		1000 tips/ pack
BGT000100FB000	BGT-100FB	100		1000 tips/ pack
BGT000200FB000	BGT-200FB	200		1000 tips/ pack
BGT001000FB000	BGT-1000FB	1000		1000 tips/ pack
BGT001000XLFBO	BGT-1000XFB	1000	Long	500 tips/ pack

Universal Graduated Filter Tips Bulk Pack Sterile

Product Code	Short Code	Tip Vol μ l	Special Feature	Selling Unit
BGT00010SFB000	BGT-10SFB	10		1000 tips
BGT00010XLSFBO	BGT-10XSFB	10	Long	1000 tips
BGT00020SFB000	BGT-20SFB	20		1000 tips
BGT00050SFB000	BGT-50SFB	50		1000 tips
BGT00100SFB000	BGT-100SFB	100		1000 tips
BGT00200SFB000	BGT-200SFB	200		1000 tips
BGT01000SFB000	BGT-1000SFB	1000		1000 tips
BGT01000XLSFBO	BGT-1000XSFB	1000	Long	500 tips

Universal Graduated Filter Tips Bulk Pack Sterile Low Retention

Product Code	Short Code	Tip Vol μ l	Special Feature	Selling Unit
BGT000010SLFB0	BGT-10LFRB	10		1000 Tips
BGT00010XLSLFB	BGT-10XLFR	10	Long	1000 Tips
BGT000020SLFB0	BGT-20LFR	20		1000 Tips
BGT000050SLFB0	BGT-50FR	50		1000 Tips
BGT000100SLFB0	BGT-100FR	100		1000 Tips
BGT000200SLFB0	BGT-200FR	200		1000 Tips
BGT001000SLFB0	BGT-1000FR	1000		1000 Tips
BGT01000XLSLFB	BGT-1000XLFR	1000	Long	500 Tips

Universal Graduated Filter Tip Racks

Product Code	Short Code	Tip Vol μ l	Special Feature	Selling Unit
BGT000010FR000	BGT-10FR	10		10 X 96 Tips/rack
BGT000010XLFRO	BGT-10XFR	10	Long	10 X 96 Tips/rack
BGT000020FR000	BGT-20FR	20		10 X 96 Tips/rack
BGT000050FR000	BGT-50FR	50		10 X 96 Tips/rack
BGT000100FR000	BGT-100FR	100		10 X 96 Tips/rack
BGT000200FR000	BGT-200FR	200		10 X 96 Tips/rack
BGT001000FR000	BGT-1000FR	1000		6 X 96 Tips/ rack
BGT001000XLFRO	BGT-1000XFR	1000	Long	6 X 96 Tips/ rack

UNIVERSAL GRADUATED FILTER TIPS

Universal Graduated Filter Tip Rack Sterile

Product Code	Short Code	Tip Vol μ l	Special Feature	Selling Unit
BGT00010SFR000	BGT-10SFR10	10		10 X 96 Tips/rack
BGT00010XLSFR0	BGT-10XLSFR	10	Long	10 X 96 Tips/rack
BGT00020SFR000	BGT-20SFR	20		10 X 96 Tips/rack
BGT00050SFR000	BGT-50SFR	50		10 X 96 Tips/rack
BGT00100SFR000	BGT-100SFR	100		10 X 96 Tips/rack
BGT00200SFR000	BGT-200SFR	200		10 X 96 Tips/rack
BGT01000SFR000	BGT-1000SFR	1000		6 X 96 Tips/ rack
BGT01000XLSFR0	BGT-1000XLSFR	1000	Long	6 X 96 Tips/ rack

Universal Graduated Filter Tip Rack Sterile Low Retention

Product Code	Short Code	Tip Vol μ l	Special Feature	Selling Unit
BGT0010SLFR000	BGT-10SLFR	10		10 X 96 Tips/rack
BGT0010XLSLFR0	BGT-10XLSLFR	10	Long	10 X 96 Tips/rack
BGT0020SLFR000	BGT-20SLFR	20		10 X 96 Tips/rack
BGT0050SLFR000	BGT-50SLFR	50		10 X 96 Tips/rack
BGT0100SLFR000	BGT-100SLFR	100		10 X 96 Tips/rack
BGT0200SLFR000	BGT-200SLFR	200		10 X 96 Tips/rack
BGT1000SLFR000	BGT-1000SLFR	1000		6 X 96 Tips/ rack
BGT1000XLSLFR0	BGT-1000XLSLFR	1000	Long	6 X 96 Tips/ rack

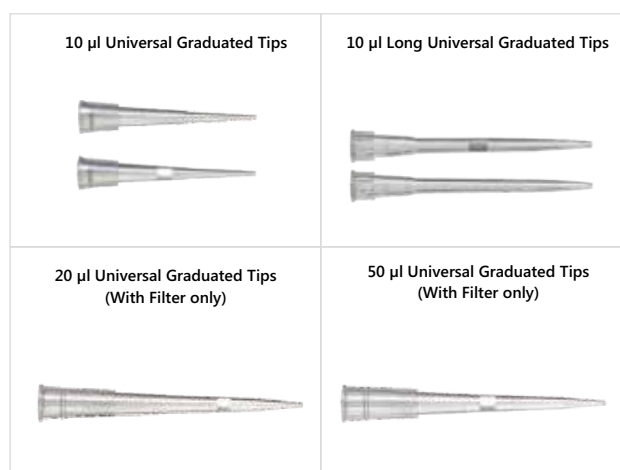
UNIVERSAL GRADUATED INDIVIDUALLY WRAPPED TIPS

Universal Graduated Tips Sterile Individually Wrapped

Product Code	Short Code	Tip Vol μ l	Special Feature	Selling Unit
BGT000200SW000	BGT-2000SW	200		400 Tips/ pack
BGT001000SW000	BGT-1000SW	1000		a200 tips/ pack

Universal Graduated Tips Sterile Low Retention Individually Wrapped

Product Code	Short Code	Tip Vol μ l	Special Feature	Selling Unit
BGT00200SLW000	BGT-2000SLW	200		400 tips/ pack
BGT01000SLW000	BGT-1000SLW	1000		200 tips/ pack



EMPTY TIP BOX RACKS

Product Code	Short Code	Tip Vol μ l	Special Feature	Selling Unit
BGT00010ETR000	BGT-10ETR	10		10 Rack Boxes
BGT00010XLETR0	BGT-10XETR	10	Long	10 Rack Boxe
BGT00200ETR000	BGT-200ETR	200		10 Rack Boxes
BGT01000ETR000	BGT-1000ETR	1000		6 Rack Boxes
BGT01000XLETR0	BGT-1000XETR	1000	Long	6 Rack Boxes

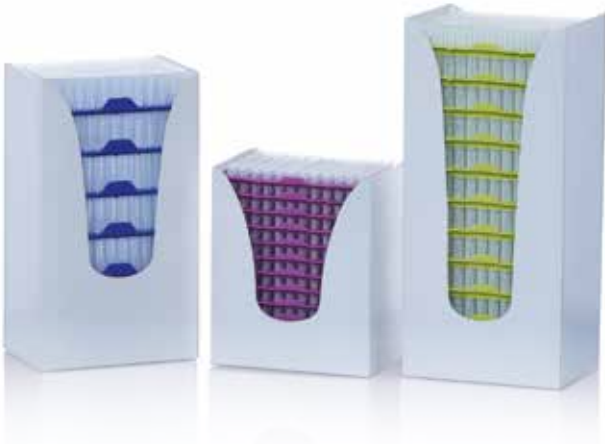
Bulk pack is a pack of 1000 tips

Racks are tip boxes with 96 tips in a rack

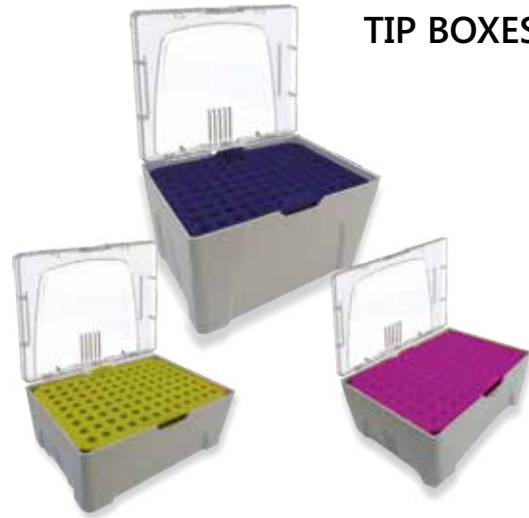
Reload racks are racks of 96 tips

HSN CODE : 90319000

RELOADING STACK




EMPTY TIP BOXES




We, **BOROSIL LIMITED** (which was a wholly owned subsidiary of **Borosil Glass Works Limited** and formerly known as Hopewell Tableware Limited), a company registered under the Companies Act, 1956 and having its registered office at 1101, Crescenzo House, 44, Dr. R.G. Thadani Marg, Worli, Mumbai - 400018. are the owners and proprietor's of the Trademark **BOROSIL®**, which is a registered mark. Pursuant to NCLT Mumbai Bench order dated 15 Jan 2020, sanctioning a Composite Scheme of Amalgamation and Arrangement, the trademark **BOROSIL** which was earlier owned by BGWL has been vested in **BOROSIL LIMITED**.

The said, trademark **BOROSIL®** has been used in the market, to sell and export a wide variety of glassware products since more than 5(five) decades throughout India as well as several countries across the globe.

The Trademark **BOROSIL®** has acquired a very high reputation and goodwill by virtue of long, extensive and continuous use. The said trademark is associated and identified exclusively with the goods manufactured, marketed and sold by **BOROSIL LIMITED** (which was a wholly owned subsidiary of **Borosil Glass Works Limited** and formerly known as Hopewell Tableware Limited).

It has, from time to time come to our notice that some persons occasionally try to sell spurious goods by copying the **BOROSIL®** trademark and/or 'Borosil Logo' 

The trade and public are cautioned that only products manufactured, marketed and sold by erstwhile **Borosil Glass Works Limited** and **BOROSIL LIMITED** are permitted to carry the trademark **BOROSIL®** or 'Borosil Logo' 

Those who are deceiving the public by copying the Trademark **BOROSIL®** or 'Borosil Logo'  or using it wrongly on products not made, marketed and /or sold by **Borosil Limited** (which was a wholly owned subsidiary of **Borosil Glass Works Limited** and formerly known as Hopewell Tableware Limited), will be prosecuted and **Borosil Limited** will adopt all legal recourse available to it, which may be Civil or Criminal in nature and may include police raids, to prevent such unauthorized use without giving further notice.

The Trade and Public are cautioned that they should always request for a bill on purchase of their products, as spurious goods are harmful and have dangerous and adverse effects to the life of the user as well as the nation.

We request you to bring to our attention any instances of such nefarious activities, which you may come across, we shall maintain the secrecy of you identify.

Correspondence in this connection may please be made at registered office address of the Company.

visit www.loveforscience.in

PERIODIC TABLE OF THE ELEMENTS

Love For Science

BY BOROSIL



ATOMIC NUMBER
SYMBOL
NAME
GROUP
PERIOD
STANDARD
ATOMIC WEIGHT

1 H HYDROGEN 1.008 [1.0078, 1.0082]	2 He HELIUM 4.0026	3 Li LITHIUM 6.941 [6.938, 6.97]	4 Be BERYLLIUM 9.0122	5 B BORON 10.811 [10.806, 10.821]	6 C CARBON 12.011 [12.009, 12.012]	7 N NITROGEN 14.007 [14.006, 14.008]	8 O OXYGEN 15.999 [15.998, 16.000]	9 F FLUORINE 18.998	10 Ne NEON 20.180	11 Na SODIUM 22.990 [24.304, 24.307]	12 Mg MAGNESIUM 24.305 [24.304, 24.307]	13 Al ALUMINIUM 26.982 [28.084, 28.086]	14 Si SILICON 28.086 [28.084, 28.086]	15 P PHOSPHORUS 30.974 [30.974, 30.974]	16 S SULFUR 32.06 [32.059, 32.076]	17 Cl CHLORINE 35.45 [35.448, 35.457]	18 Ar ARGON 39.95 [39.948, 39.963]	19 K POTASSIUM 39.098	20 Ca CALCIUM 40.078 (4)	21 Sc SCANDIUM 44.956	22 Ti TITANIUM 47.867	23 V VANADIUM 50.942	24 Cr CHROMIUM 51.996	25 Mn MANGANESE 54.938	26 Fe IRON 55.854 (2)	27 Co COBALT 58.933	28 Ni NICKEL 58.693	29 Cu COPPER 63.546 (3)	30 Zn ZINC 65.38 (2)	31 Ga GALLIUM 69.723	32 Ge GERMANIUM 72.630 (3)	33 As ARSENIC 74.922	34 Se SELENIUM 78.971 (8)	35 Br BROMINE 79.905 [79.901, 79.907]	36 Kr KRYPTON 83.798 (2)	37 Rb RUBIDIUM 85.468	38 Sr STRONTIUM 87.62	39 Y YTRIUM 88.906	40 Zr ZIRCONIUM 91.224 (2)	41 Nb NIOSBIUM 92.906	42 Mo MOLYBDENUM 95.95	43 Tc TECHNETIUM	44 Ru RUTHENIUM 101.07 (2)	45 Rh RHODIUM 102.91	46 Pd PALLADIUM 106.42	47 Ag SILVER 107.87	48 Cd CADMIUM 112.41	49 In INDIUM 114.82	50 Sn TIN 118.71	51 Sb ANTIMONY 121.76	52 Te TELLURIUM 127.60 (3)	53 I IODINE 126.90	54 Xe XENON 131.29	55 Cs CAESIUM 132.91	56 Ba BARIUM 137.33	57-71 LANTHANIDS	58 Fr FRANCIUM	59 Pr PRASEODYMIUM 140.91	60 Nd NEODYMIUM 144.24	61 Pm PROMETHIUM	62 Sm SAMARIUM 150.36 (2)	63 Eu EUROPIUM 151.96	64 Gd GADOLINIUM 157.25 (2)	65 Tb TERBIUM 158.93	66 Dy DYSPROSIUM 162.50	67 Ho HOLMIUM 164.93	68 Er ERBIUM 208.98	69 Tm THULIUM 168.93	70 Yb YTERBIUM 173.05	71 Lu LUTETIUM 174.97	72 Ra RADIUM	73 Ac ACTINIUM	74 Th THORIUM 232.04	75 Pa PROTACTINIUM 232.04	76 U URANIUM 238.03	77 Np NEPTUNIUM	78 Pu PLUTONIUM	79 Am AMERICIUM	80 Cm CURIUM	81 Bk BERKELIUM	82 Cf CALIFORNIUM	83 Es EINSTEINIUM	84 Fm FERMIUM	85-103 ACTINOIDS	86 La LANTHANUM 138.91	87 Ce CERUM 140.12	88 Pr PRASEODYMIUM 140.91	89 Nd NEODYMIUM 144.24	90 Pm PROMETHIUM	91 Sm SAMARIUM 150.36 (2)	92 Eu EUROPIUM 151.96	93 Gd GADOLINIUM 157.25 (2)	94 Tb TERBIUM 158.93	95 Dy DYSPROSIUM 162.50	96 Ho HOLMIUM 164.93	97 Er ERBIUM 208.98	98 Tm THULIUM 168.93	99 Yb YTERBIUM 173.05	100 Lu LUTETIUM 174.97	101 Md MENDELEVIUM	102 No NOBELIUM	103 Lr LAWRENCIUM
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Did you know?
Dmitry Mendeleev discovered the periodic system 150 years ago. To commemorate this, 2019 has been proclaimed the International Year of the Periodic Table of Chemical Elements.

ACTINOIDS

LANTHANIDS

NOBLE GASES

HALOGENS

NONMETALS

SEMI-METALS

BASIC METALS

TRANSITION METALS

ALKALINE EARTH METALS

ALKALI METALS

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