



SCHOTT DURAN® laboratory glass bottles and screw caps

- Rely on the original! -



**SCHOTT
DURAN®**

SCHOTT DURAN® laboratory glass bottles

Fields of application and properties

The outstanding properties of DURAN® laboratory glass bottles have been valued for many years. By continuous development and improvement, SCHOTT is able to provide top-quality products and systems based on the original, well proven bottle design. Their consistency, reliability and flexibility in storage, packaging and preparation applications make DURAN® laboratory glass bottles the global standard for the chemical, pharmaceutical and bioscience fields.

- conformity with ISO standards 3585 and 4796
- glass type No. 1, normal glass pursuant to USP 27; EP; DAB 10
- high service temperature of up to 500°C
- excellent thermal shock resistance
- easy to clean and readily sterilized
- excellent chemical resistance
- highly inert
- standardized GL screw thread and matching screw cap systems ensure a low-leakage closure with excellent pouring capabilities
- stable design and uniform wall strength make DURAN® laboratory glass bottles robust helpers in daily work even under high mechanical strain and rapid or extreme changes in temperature
- all DURAN® laboratory glass bottles are now supplied with a printed **"Retrace Code"** allowing batch and quality certification via the internet

NEW

200



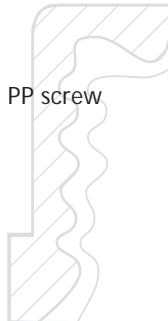
A perfect solution to each and every application

The classic version – the DURAN® laboratory glass bottle



The original is widely used in laboratories and factories in numerous applications.

- graduated scale
- big lettering panel
- available with or without PP screw cap and pouring ring
- available in sizes
25 ml to 20,000 ml



The UV-resistant version – amber stained DURAN® laboratory glass bottle

The amber stained DURAN® laboratory glass bottle protects its contents against UV radiation. It is especially suitable for preparing light-sensitive media and storing substances for an extended period of time.



- UV absorption up to a light wavelength of about 500 nm
- retains chemical resistance due to a special staining technique (the amber colour is diffused into the outer layer of the bottles' exterior leaving the interior unchanged)
- available in sizes
25 ml to 20,000 ml



The pressure-resistant version – DURAN® pressure plus

The DURAN® pressure plus laboratory glass bottle permits safe working under vacuum and excess pressure, providing increased safety to technicians and security to contents.



- special design pursuant to ISO standard 4796
- vacuum- and pressure-resistance from -1 through +1.5 bar
- warranted pressure resistance certificated via the internet
- tested safety pursuant to EN 1595 with “TÜV-GS” statutory quality seal
- blue graduation for optical distinction
- available in the standard and amber stained versions
- available in sizes 250 ml to 1,000 ml

The space-saving version – DURAN® square bottle

DURAN® square bottles ensure comfortable handling due to the special square-section design. In addition to the proven DURAN® properties, the square bottles are both cost and space-saving, no matter whether in autoclave, drier cabinet, in the warehouse or washing machine. For example, in a defined space that would normally hold 50 standard (100 ml) bottles, 72 square bottles (100 ml) can be accommodated and autoclaved at the same processing costs. This will correspond to a 44% saved space.

- provided with pouring ring and blue PP screw cap
- ergonomic handling
- high stability
- non-skid base
- stackable
- available in sizes 100 ml to 1,000 ml



The coated version – DURAN® Protect

The DURAN® Protect laboratory glass bottle may be used for especially valuable or hazardous contents. Efficient protection is secured by a plastic coating which in case of breakage prevents leakage from occurring, holding together the damaged bottle.



- ideal for storage and transportation
- a temperature-resistance of up to of 135 °C permits autoclaving
- minimum operating temperature of about -30 °C
- suitable for microwave use
- available in sizes 25 ml to 5,000 ml



The Retrace Code: **NEW** Easy traceability

Quality maintenance for laboratory and production processes

Increasingly strict requirements and standards for quality maintenance and traceability of packing means auxiliaries (pursuant to EN-ISO standard no. 9000/8402, GMP, EU/VO no. 178/2002) are gaining importance.

To comply with such requirements, SCHOTT has developed the "Retrace Code" now marked on all DURAN® laboratory glass bottles. The eight-digit number on the DURAN® laboratory glass bottles permits retracing back to the time of production and to the related batch. The code permits unbroken documentation to users within their quality management system, which is especially useful in the medical, pharmaceutical and food industries



The Batch Certificate – easy, compliant and available at any time

The retrace code along with SCHOTT's article number will enable the user via the internet (www.us.schott.com/duran) to obtain, at any time, a **batch and quality certificate** for each DURAN® laboratory glass bottle. The certificate contains the production date and a variety of references to standards and USP/EP-conformity.



For additional information please refer to www.us.schott.com/duran

The proper screw caps for your special purposes

DURAN® laboratory glass bottles when combined with the original accessories provide a system that complies with the utmost requirements in a large variety of conditions (e.g. temperature resistance, chemical resistance, USP-conformity, leak proof). Simply make your choice from our comprehensive range of screw caps and pouring rings (see table "Screw caps - in summary").

Universal application: The Premium screw cap

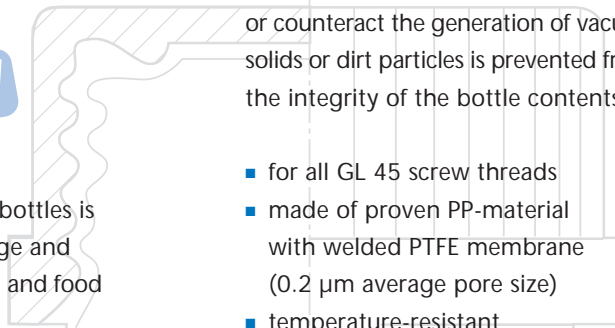
SCHOTT's Premium screw cap for laboratory glass bottles is suitable for use under strict conditions in the storage and packing of products in the pharmaceutical, chemical and food industries.

- for all GL 45 screw threads
- USP/EP/FDA-conforming
- made of material with high chemical high resistance (TPCh260)
- no addition of colouring agents (no colour leaching)
- temperature-resistant from -196°C to $+260^{\circ}\text{C}$
- silicone seal PTFE-coated on both sides
- seal rigidly connected to cap (thereby preventing the medium from creeping between lid and seal)
- non-dripping and safe work thanks to pouring ring
- ideal for dry sterilization at high temperatures
- highly suitable for storage and transportation



Order No. 1088679

NEW



Permeable and at the same time leak proof: The Membrane screw cap

SCHOTT's Membrane screw cap for laboratory glass bottles is especially suitable for packing and storing gas-generating liquids, in particular hazardous chemicals. The gas-permeable Membrane screw cap will reduce the risk of excess pressure or counteract the generation of vacuum. The ingress of liquids, solids or dirt particles is prevented from occurring, maintaining the integrity of the bottle contents.

- for all GL 45 screw threads
- made of proven PP-material with welded PTFE membrane (0.2 μm average pore size)
- temperature-resistant up to $+140^{\circ}\text{C}$
- 2-way membrane with pressure compensation from 0.1 bar onward
- ideal for use in autoclaving (removal is not necessary)



Order No. 1088655

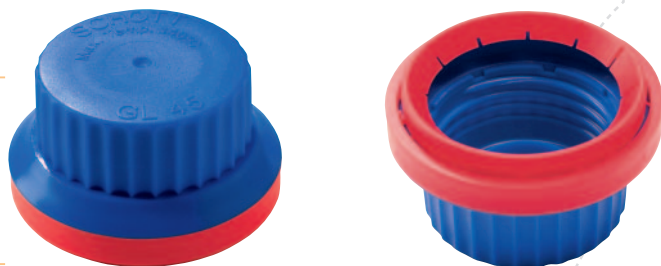
Place your order with your laboratory dealer.
Test and you will be impressed!

Safety at a glance: The tamper-evident screw cap

NEW

SCHOTT's tamper evident screw cap is a unique way to safely store bottle contents, especially precious or critical media. To safely close the laboratory bottle, the screw cap must be fixed to the bottle. After a slight clicking noise the plastic ring is firmly seated on the bottleneck. When removing the tamper-evident screw cap for the first time, the perforation is severed, thereby ensuring easy recognition that the bottle has been opened.

- for all GL 45 screw threads
- made of proven PP material
- temperature resistant up to +140°C
- after unscrewing the cap or severing the perforation the screw cap also can be used as a "common" screw cap



Order No. 1017526

Unmistakable: The coloured screw caps

NEW

SCHOTT's well-known blue colour standard screw cap is also available in green, yellow and grey versions and is provided with a pouring ring matching in colour. The careful lettering of the laboratory bottles combined with the use of coloured caps is ideal to clearly mark frequently occurring reagents or groups of reagents. Media can be instantly determined, thereby simplifying the distinction between them, even with the bottle opened.

- for all GL 45 screw threads
- made of proven PP-material
- temperature-resistant up to +140°C
- available in yellow, grey and green as well as blue



Order No. 29338286 (green)



Order No. 29338280 (yellow)



Order No. 2923928 (blue)



Order No. 29338288 (grey)

Place your order with your laboratory dealer. For a better organisation and enhanced safety in your laboratory!

SCHOTT's screw caps – in summary

| Product | Properties | | | | | | | | | | |
|--|------------|-------------------|------------------------|---------------------|-----------|--------------------|-----------------------|--------------------------|--------------------|--------------------|--------------------------------------|
| | Material | Colour | Temperature-resistance | Chemical resistance | Leakproof | USP/FDA-conformity | Safety/Originality | Pressure compensation | DIN thread GL | Gap for tube/Septa | With transponder for data protection |
| Premium screw cap | TPCh260 | colourless | -196 °/+260 °C | +++ | +++ | yes | no | no | 45 | no | no |
| Membrane screw cap | PP/PTFE | blue | -40 °/+140 °C | + | + | no | no | yes: from 0,1 bar onward | 45 | no | no |
| PBT screw cap, red | PBT | red | -45 °/+180 °C | ++ | ++ | no | no | no | 14, 18, 25, 32, 45 | no | no |
| Standard screw cap PP | PP | blue | -40 °/+140 °C | + | + | no | no | no | 25, 32, 45 | no | no |
| Standard screw cap PP | PP | yellow/green/grey | -40 °/+140 °C | + | + | no | no | no | 45 | no | no |
| Tamper-evident screw cap | PP | blue/red | -40 °/+140 °C | + | + | no | yes, with perforation | no | 45 | no | no |
| Tamper-evident screw cap including transponder | PP | blue/yellow | -40 °/+140 °C | + | + | no | yes, with perforation | no | 45 | no | yes |
| Plastic screw caps with aperture | PBT | red | -45 °/+180 °C | ++ | ++ | no | no | no | 14, 18, 25, 32, 45 | yes | no |

Pouring rings for:

| | | | | | | | | | | | |
|-----------------------|---------|-------------------|----------------|-----|-----|-----|--|--|--------|--|--|
| Premium screw cap | TPCh260 | colourless/light | -196 °/+260 °C | +++ | +++ | yes | | | 45 | | |
| PBT screw cap | ETFE | red | -100 °/+180 °C | ++ | ++ | no | | | 32, 45 | | |
| Standard PP screw cap | PP | blue | -40 °/+140 °C | + | + | no | | | 32, 45 | | |
| Standard PP screw cap | PP | yellow/green/grey | -40 °/+140 °C | + | + | no | | | 45 | | |



Premium screw cap



Membrane screw cap



PBT screw cap, red



Standard screw cap PP/blue



Standard screw cap PP/grey



Standard screw cap PP/green



Standard screw cap PP/yellow



Tamper-evident screw cap



Premium pouring ring



Pouring ring for PBT screw cap



Pouring rings for standard PP screw caps





Our products are available from your laboratory dealer. For more details, such as article no., dimensions and technical information, click the internet under www.us.schott.com/duran or see DURAN® laboratory catalogue!

50086 e 0105 6.5 ba/fo Printed in Germany

Labware
SCHOTT North America, Inc.
Corporate Office
555 Taxter Road
Elmsford, NY 10523
Phone: (914) 831-2200
Fax: (914) 831-2201
E-mail: info@us.schott.com
www.us.schott.com

SCHOTT
glass made of ideas