

## DURAN® DOUBLE WALLED, WIDE MOUTH BOTTLE GLS 80®

The DURAN® double walled, wide mouth bottles GLS 80® incorporate an integral jacket that isolates the contents from the external environment. Heated or cooled liquids can be circulated through the jacket to control the temperature within the screw topped DURAN® bottle. The DURAN® double walled bottles offer a sealable and more flexible alternative to open topped jacketed beakers.

### Applications

- Simple, low cost, jacketed chemostat or bioreactor for cell culture.
- Vessel for temperature-controlled reactions such as enzyme digestions.
- Simple continuous flow stirred reactor system with the optional GLS 80® cap components.
- Thermostatic vessel to maintain fluids, or high viscosity liquids at a constant temperature, useful when working with endo- or exothermic reagents.
- Large cold trap or condenser when used with dry ice in the inner container.

**NEW**



### Features

- Wide usable temperature range of  $-40$  to  $+120$  °C. The range can be extended from  $-45$  to  $+180$  °C with the optional white GLS 80® polyethersulfone cap. DURAN® glass components are usable from  $-196$  to  $+300$  °C, but care must be taken to limit the rates of heating or cooling.
- Manufactured from DURAN® borosilicate 3.3 glass, renowned for its excellent thermal performance and high resistance to chemical attack.
- All components are fully autoclavable.
- Available in two convenient sizes: 500 and 1000 ml.
- The wide 65 mm inner diameter of the GLS 80® wide mouth provides easy access to the contents, or for cleaning.
- The flat inner base is compatible with magnetic stir bars, or the DURAN® GLS 80® magnetic stirrer cap system.
- Compatible with full range of wide mouth GLS 80® connection cap systems for liquid addition or removal during processing.
- The inner vessel features an easy-to-read graduated volume scale.
- The GL 18 outlet hose connectors are removable for increased safety.
- The positions of the 10 mm PTFE inlet/outlet hose connectors are optimized for a uniform flow around the jacket to ensure consistent heating or cooling.

Note: The maximum pressure in the double walled glass jacket must not exceed +50 kPa gauge. These products must not be used under vacuum.

## Ordering information

Cat. No.	Description	Capacity ml	h mm	d mm	Usage temp. range °C	Pack Quantity
24 256 44 51	DURAN® double walled wide mouth bottle GLS 80®, supplied complete with PBT GL 18 aperture caps, PTFE 10 mm hose connectors, polypropylene pouring ring and GLS 80® cap	500	170	110	-40 to +120	1
24 256 54 56	DURAN® double walled wide mouth bottle GLS 80® supplied complete with PBT GL 18 aperture caps, PTFE 10 mm hose connectors, polypropylene pouring ring and GLS 80® cap	1000	270	110	-40 to +120	1

## Optional accessories



Item	Cat. No.	Description	Benefit	Usage temp. range °C	Pack Quantity
1	11 658 88	DURAN® GLS 80® white polyethersulfone (PSU) cap with PTFE coated cap liner**	Offers a higher temperature resistance than the supplied polypropylene cap.	-45 to +180	5
2	11 601 68	DURAN® GLS 80® blue polypropylene vented cap**	PTFE membrane vent allows gas exchange with the atmosphere, but protects from external contamination.	-40 to +120	2
3	12 003 79	DURAN® Stirred reactor wide mouth cap, GLS 80® supplied with anchor shaped magnetic stirrer, 4 connection ports (2x GL 18 and 2x GL 14)**	Allows the efficient mixing of the contents during heating or cooling using a magnetic stirrer. Liquid may be added or removed via the optional tube connectors.	-40 to +120	1
4	29 120 91 04	DURAN® Mixing and connection wide mouth Cap GLS 80® includes DURAN® KPG stirrer shaft 10 mm diameter and 410 mm in length and 4 connection ports (Supplied with 2x GL 18 and 2x GL 14 screw caps)**	Connection to an overhead lab mixer allows effective mixing of liquids during heating or cooling. The stirrer has a 10 mm diameter shaft and is made from DURAN® glass. Liquid may be added or removed via the optional tube connectors.	-40 to +120	1

\*\* Note: DURAN® double walled bottles must be ordered separately (500 ml – 242564451 or 1000 ml – 242565456)