DURAN® STERILE VENTING MEMBRANE SCREW CAPS





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DURAN® Original GL Screw Capped Laboratory bottles are ideal containers for sterilising and storing media or buffer solutions. However, it is strongly recommended that during the autoclaving cycle the caps are only loosely tightened. Heating times are reduced if the steam is easily able to penetrate the contents of the bottle. Loose caps also reduce the risk of failure due to pressure build up inside the bottle, which can reach 400 kPa (absolute). In addition, tightening the screw caps immediately after autoclaving, will result in a vacuum caused by the cooling of the steam. This can lead to bottle failure, and is an especially important consideration for larger bottles^{*}. To overcome these limitations, the sterile venting membrane screw caps were developed. The screw cap can be tightly closed as the membrane permits an automatic sterile gas exchange, allowing safe pressure equalisation during the autoclave cycle, and at the same time ensuring the sterility of the bottle contents.

Applications

- Pressure equalisation during steam sterilisation / autoclaving of media or buffers
- Sterile gas exchange for aerobic microbial, shaker and suspension cell cultures
- Short-term storage of sterilised media
- Storage of gas generating materials



Features and Benefits

- The microporous structure of the expanded polytetrafluoroethylene (ePTFE) membrane enables sterile gas exchange in two directions while blocking the flow of high surface tension aqueous liquids like water
- New, thinner 0.2 μm ePTFE membrane combined with larger vent holes increase the rates of gas exchange
- Membrane Caps can be autoclaved at 121 $^{\circ}\mathrm{C}$ (20 minutes) or 134 $^{\circ}\mathrm{C}$ (3 minutes)
- Cost effective as the caps can be reused several times**
- Convenient as six caps are available (GL 25, 32, 45, 56, GLS 80[®] and YOUTILITY) allowing the use with a large range of bottle sizes from 10 ml up to 3500 ml*
- Biocompatible: The ePTFE filter material conforms to USP <88> 121 °C Class VI
- The PTFE membrane and its polypropylene mesh support are ultrasonically welded in place forming a durable seal
- For DURAN® GL 45 bottles that are 5 Litres or larger, we recommend the use of article number: 29 261 26 07 (DURAN® 1-port stainless steel Connection Cap System GL 45) together with a suitable sterile air venting capsule filter.
- ** Replacement of the DURAN® membrane cap is recommended after 3 to 5 autoclave cycles due to durability, or if the membrane becomes damaged or contaminated.

Ordering information

	Description	Thread	Pack Unit	Cat. No.
Improved	DURAN® Sterile Venting Membrane screw cap, GL 25, PP, blue, for DURAN® laboratory glass bottles ePTFE Pore size 0.2 μm	GL 25	5	29 118 13 07
Improved	DURAN® Sterile Venting Membrane screw cap, GL 32, PP, blue, for DURAN® laboratory glass bottles ePTFE Pore size 0.2 μm	GL 32	5	29 118 19 07
Improved	DURAN® Sterile Venting Membrane screw cap, GL 45, PP, blue, for DURAN® laboratory glass bottles ePTFE Pore size 0.2 μm	GL 45	5	29 118 28 09
NEW	DURAN® YOUTILITY Sterile Venting Membrane screw cap, GL 45, PP, Cyan, for DURAN® laboratory glass bottles ePTFE Pore size 0.2 µm	GL 45	4	29 116 28 07
NEW	DURAN® Sterile Venting Membrane screw cap, GL 56, PP, White, for DURAN® TILT bottle ePTFE Pore size 0.2 μm	GL 56	4	29 118 56 09
Improved	DURAN® Sterile Venting Membrane screw cap, GLS 80®, PP, blue, for DURAN® laboratory glass bottles ePTFE Pore size 0.2 μm	GLS 80®	2	29 118 91 05



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