

Diamond® RealSeal™

Plastic Laboratory Bottles

Diamond® RealSeal™ Plastic Laboratory Bottles from Globe Scientific meet the requirements of the most demanding applications. Rugged and durable, these bottles are a safe, shatterproof alternative to glass bottles for collection, storage, or shipping of samples, media, and reagents.

Diamond® RealSeal™ Laboratory bottles are precision molded from virgin resins for consistent wall thickness and smooth interior and exterior surfaces. The bottles include leak-proof polypropylene caps that are engineered with an integrated seal ring for leak-proof closure. Linerless caps reduce the contamination risk associated with liners. RealSeal™ bottles and caps employ top quality, semi-buttressed threads with straight shoulders that outperform inferior bottles with round threads. These leak-proof bottles are designed and tested to withstand the highest pressure thresholds in the industry.

The Diamond® RealSeal™ Difference:

Medical Grade Resins to Meet Demanding Requirements

- USP Class VI for pharma and research applications
- FDA CFR-21 compliant for food contact
- Free of heavy metals and RoHS compliant
- BPA and phthalate free

Precision Molded for Consistent Wall Thickness and Smooth Surfaces

- Improves bottle and seal integrity
- Reduces content “hang-up”
- Manufactured in an ISO 13485 and ISO 9001 certified facility

Leakproof, Linerless Caps for Secure Closure

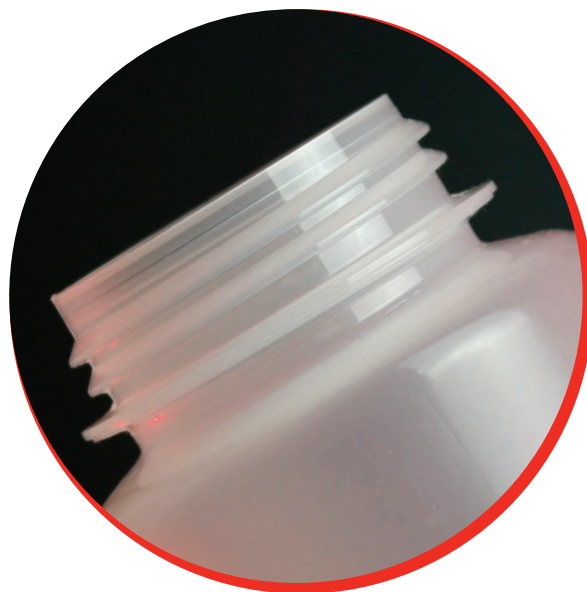
- Integrated seal ring molded in cap to prevent leaks
- Linerless cap design to reduce contamination risks associated with liners: wrinkles, tears, wear, corrosion, reaction and leakage

Value

- Laboratory bottle quality and performance with savings associated with “economy” bottles
- Reduced shipping costs compared to glass bottles

Safety/Convenience

- Safe, shatter-resistant alternative to glass bottles
- Lighter than glass for improved handling



Diamond® RealSeal™ bottles and caps are designed with semi-buttressed threads for superior performance compared to round threads found on inferior bottles.

Diamond® RealSeal™ Leak Testing Protocol

Standard leak testing of Diamond® RealSeal™ bottles is performed with water.*

Leak testing and “Leak proof” designation for bottles up to 1000mL:

- Bottles are filled to 80% of nominal capacity, closed per minimum torque requirement
- Inverted bottles are subjected to pressure test of 85kPa and inspected for leakage.

NOTE: This test protocol applies more than 5x the pressure used by competitors to claim “leak proof” closures.

Leak testing and “Leak proof” designation for bottles, carboys and jerricans above 1000mL:

- Bottles are filled to 80% of nominal capacity, closed per minimum torque requirements
- Bottles are inverted and inspected for leakage
- Bottles are partially inverted with water in contact with closure for 24 hours and are inspected for leakage

***NOTE:** Testing with other liquids may yield different results.

Application Torques

	Bottle Capacity (mL)	Neck Finish (mm)	Minimum Torque (in-lb)	Maximum Torque (in-lb)
Wide Mouth				
	30	28-415	15.6	21.7
	60	28-415	15.6	21.7
	125	38-415	21.7	30.4
	250	43-415	27.8	38.2
	500	53-415	33	45.1
	1000 HDPE/LDPE	63-415	40	55.5
	1000 PP	63-415	50	55.5
Narrow Mouth				
	30	20-415	9.5	13.9
	60	20-415	9.5	13.9
	125	24-415	11.3	16.5
	250	24-415	11.3	16.5
	500	28-415	15.6	21.7
	1000	38-430	26.9	33
Rectangular				
	125	28-415	15.6	21.7
	250	38-415	21.7	30.4
	500	48-415	29.5	41.6
	1000	53-415	33	45.1
Large Format Wide Mouth				
	2000 Round	100-415	46.8	64.2
	2000 Rectangular	63-415	50	55.5
	4000 Round	100-415	46.8	64.2
	4000 Rectangular	100-415	46.8	64.2
Large Format Narrow Mouth				
	2L	38-430	26.9	33
	4L	38-430	26.9	33
	8L	53T	37.3	52



Diamond® RealSeal™

Heavy Duty Vacuum Bottles and Aseptic Transfer Caps

Diamond® RealSeal™ Heavy Duty Vacuum Bottles have thick walls to withstand the forces of repeated vacuum applications in the laboratory. Designed for liquid aspiration and transfer operations, the bottles come complete with a Polypropylene (PP) cap and TPE gasket for leakproof sealing. The polypropylene bottles are autoclavable and will hold vacuum for up to 24 hours at 20°C. All of our Heavy Duty Vacuum Bottles are manufactured from Medical Grade USP Class VI resins to meet requirements of most laboratories.

When combined with the matching Aseptic Transfer Caps, Heavy Duty Vacuum Bottles can be used for safe, sterile transfer of reagents, media and solutions required in biotechnology, cell culture and other laboratories.

Bottle Features:

- Medical grade resins that are USP Class VI
- Thick walls to withstand vacuum pressures
- Polypropylene (PP) bottles are autoclavable at 121°C and will hold vacuum up to 24 hours at 20°C
- White polypropylene (PP) caps have TPE gasket for leakproof sealing

Aseptic Transfer Cap Features:

- Provide aseptic transfer of reagents, media, and solutions to and from heavy duty vacuum bottles
- Made from medical grade resin that is USP Class VI
- Autoclavable at 121°C

Item #	Description	Unit(s)
7081000	Heavy Duty Vacuum Bottle, 1L, PP with PP Cap	2 & 12
7082000	Heavy Duty Vacuum Bottle, 2L, PP with PP Cap	2 & 12
7084000	Heavy Duty Vacuum Bottle, 4L, PP with PP Cap	Each & 6
7092000	Heavy Duty Vacuum Bottle, 2L, HDPE with PP Cap	2 & 12
7094000	Heavy Duty Vacuum Bottle, 4L, HDPE with PP Cap	Each & 6
70953CAP	Bottle Closure System for Aseptic Transfer of Liquids, 52mm for 2L Heavy Duty Vacuum Bottle, PP	Each
70983CAP	Bottle Closure System for Aseptic Transfer of Liquids, 83mm for 4L Heavy Duty Vacuum Bottle, PP	Each

