



Diamond RealSeal™ Plastic Laboratory Bottles, Carboys, and Jerricans

Engineered to meet the requirements of the most demanding applications.



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

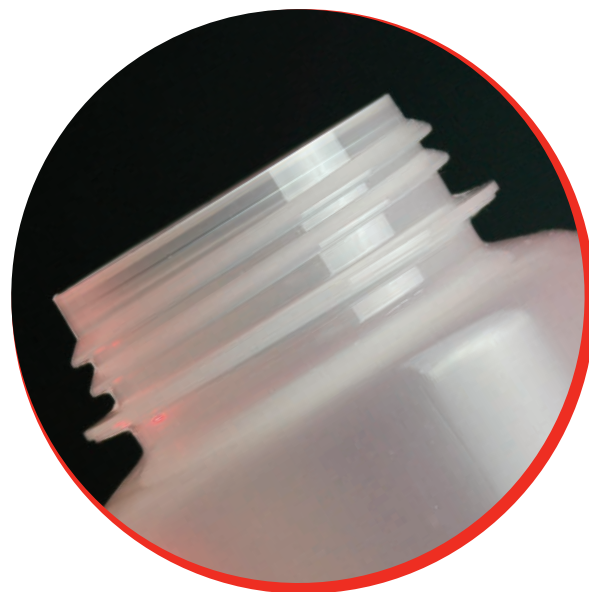
- Integrated seal ring molded in cap to prevent leaks
- Linerless cap design to reduce contamination risks associated with liners: wrinkles, tears, wear, corrosion, reaction and leakage

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™ Carboys

Diamond® RealSeal™ Plastic Carboys from Globe Scientific meet the large volume liquid storage and dispensing needs of the most demanding laboratory applications. Diamond® RealSeal™ Carboys are available in a wide range of materials and designs suitable for use with most media, reagents, and solutions used in laboratories across the world.

Like the Diamond® RealSeal™ laboratory bottle line, Diamond® RealSeal™ Carboys are precision molded from virgin resins for consistent wall thickness and smooth interior and exterior surfaces. The carboys include leak-proof polypropylene caps that are engineered with an integrated seal ring for leak-proof closure.

ROUND CARBOYS WITH SPIGOT

- Spigot allows simple and accurate dispensing of media and solutions
- Round design maximizes mixing efficiency
- Integrated handles facilitate easy carrying and pouring, even when wearing gloves
- Easy to read, molded graduations



Polypropylene (PP)

- PP carboys are autoclavable at 121°C and have the best chemical resistance

Item #	Capacity	Closure Size	Neck I.D.	Bottle O.D.	Height w/Cap	Units
7220005	5L	83mm	65mm	181mm	360mm	EA & 6
7220010	10L	83mm	65mm	249mm	390mm	EA & 6
7220020	20L	83mm	65mm	285mm	535mm	EA & 4
7220025	25L	83mm	65mm	285mm	600mm	EA & 4
7220050	50L	83mm	65mm	376mm	682mm	EA

Low-Density Polyethylene (LDPE)

- LDPE maintains flexibility and shatterproof safety down to -75°C

Item #	Capacity	Closure Size	Neck I.D.	Bottle O.D.	Height w/Cap	Units
7270005	5L	83mm	65mm	180mm	357mm	EA & 6
7270010	10L	83mm	65mm	249mm	390mm	EA & 6
7270020	20L	83mm	65mm	285mm	535mm	EA & 4
7270025	25L	83mm	65mm	285mm	596mm	EA & 4
7270050	50L	83mm	65mm	376mm	682mm	EA

High-Density Polyethylene (HDPE)

- HDPE is safe for freezer storage down to -100°C

Item #	Capacity	Closure Size	Neck I.D.	Bottle O.D.	Height w/Cap	Units
7350010	10L	83mm	65mm	249mm	390mm	EA & 6
7350020	20L	83mm	65mm	285mm	530mm	EA & 4



Diamond® RealSeal™

ROUND CARBOYS

- Round design maximizes mixing efficiency
- Integrated handles facilitate easy carrying and pouring, even when wearing gloves
- Easy to read, molded graduations



Polypropylene (PP)

- PP carboys are autoclavable at 121°C and have the best chemical resistance

Item #	Capacity	Closure Size	Neck I.D.	Bottle O.D.	Height w/Cap	Units
7200010	10L	83mm	65mm	249mm	390mm	EA & 6
7200015	15L	83mm	65mm	285mm	435mm	EA & 6
7200020	20L	83mm	65mm	285mm	535mm	EA & 4
7200025	25L	83mm	65mm	285mm	600mm	EA & 4
7200050	50L	83mm	65mm	376mm	682mm	EA

Low-Density Polyethylene (LDPE)

- LDPE maintains flexibility and shatterproof safety down to -75°C

Item #	Capacity	Closure Size	Neck I.D.	Bottle O.D.	Height w/Cap	Units
7250010	10L	83mm	65mm	249mm	390mm	EA & 6
7250015	15L	83mm	65mm	285mm	429mm	EA & 6
7250020	20L	83mm	65mm	285mm	535mm	EA & 4
7250025	25L	83mm	65mm	285mm	595mm	EA & 4
7250050	50L	83mm	65mm	376mm	682mm	EA

High-Density Polyethylene (HDPE)

- HDPE is safe for freezer storage down to -100°C

Item #	Capacity	Closure Size	Neck I.D.	Bottle O.D.	Height w/Cap	Units
7340010	10L	83mm	65mm	249mm	389mm	EA & 6
7340020	20L	83mm	65mm	285mm	535mm	EA & 4
7340050	50L	83mm	65mm	376mm	681mm	EA & 4

Amber High-Density Polyethylene (HDPE)

- Reduce UV Light transmission to protect light sensitive contents during storage and transport
- Comply with US Pharmacopeia requirements for maximum light transmission

Item #	Capacity	Closure Size	Neck I.D.	Bottle O.D.	Height w/Cap	Units
7240010AM	10L	83mm	65mm	249mm	390mm	EA & 6
7240020AM	20L	83mm	65mm	285mm	535mm	EA & 4

HEAVY DUTY CARBOYS

- Thick walls provide added strength and extra durability
- Hold full vacuum up to 8 hours
- Round design maximizes mixing efficiency
- Integrated handles facilitate easy carrying and pouring, even when wearing gloves
- Easy to read, molded graduations

Polypropylene (PP)

- PP carboys are autoclavable at 121°C and have the best chemical resistance

Item #	Capacity	Closure Size	Neck I.D.	Bottle O.D.	Height w/Cap	Units
7240010	10L	83mm	65mm	249mm	390mm	EA & 6
7240020	20L	83mm	65mm	285mm	535mm	EA & 4



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WIDE MOUTH CARBOYS

- Wide 100mm mouth for use with solids, powders, and overhead mixing equipment
- Integrated handles facilitate easy carrying and pouring, even when wearing gloves
- Easy to read, molded graduations



Polypropylene (PP)

- PP carboys are autoclavable at 121°C and have the best chemical resistance

Item #	Capacity	Closure Size	Neck I.D.	Bottle O.D.	Height w/Cap	Units
7210010	10L	100mm	95mm	249mm	390mm	EA & 6
7210015	15L	100mm	95mm	285mm	381mm	EA & 6
7210020	20L	100mm	95mm	285mm	535mm	EA & 4

Low-Density Polyethylene (LDPE)

- LDPE maintains flexibility and shatterproof safety down to -75°C

Item #	Capacity	Closure Size	Neck I.D.	Bottle O.D.	Height w/Cap	Units
7260010	10L	100mm	95mm	249mm	390mm	EA & 6
7260015	15L	100mm	95mm	285mm	378mm	EA & 6
7260020	20L	100mm	95mm	285mm	535mm	EA & 4

RECTANGULAR CARBOYS WITH SPIGOT

- Rectangular design maximizes storage efficiency
- Spigot allows simple and accurate dispensing of media and solutions
- Integrated stainless steel handle for easy carrying and pouring
- Easy to read, molded graduations



High-Density Polyethylene (HDPE)

- HDPE is safe for freezer storage down to -100°C

Item #	Capacity	Closure Size	Neck I.D.	Bottle Dimensions	Height w/Cap	Units
7310005	5L	100mm	86mm	227mm x 144mm	342mm	EA & 6
7310010	10L	100mm	86mm	284mm x 176mm	400mm	EA & 6
7310020	20L	100mm	86mm	342mm x 207mm	492mm	EA & 4

Polypropylene (PP)

- PP carboys are autoclavable at 121°C and have the best chemical resistance

Item #	Capacity	Closure Size	Neck I.D.	Bottle Dimensions	Height w/Cap	Units
7300005	5L	100mm	86mm	227mm x 144mm	342mm	EA & 6
7300010	10L	100mm	86mm	284mm x 176mm	400mm	EA & 6
7300020	20L	100mm	86mm	342mm x 207mm	492mm	EA & 4

