

# Plastic and Glass Storage Bottles

## Product Selection Guide



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### Product Ordering Information

For information on Purchasing Options, Terms and Conditions of Sale, Return and Repair Policies, and Warranty/Guarantee Registration, visit [www.corning.com/how-to-buy](http://www.corning.com/how-to-buy).

*Products may not be available in all markets.*

# A Wide Selection of Bottle Shapes, Sizes, and Materials for All Your Laboratory Needs

Corning's disposable bottles are designed for safe, secure storage of tissue culture media and sera, buffers, and other aqueous solutions. The bottles are sterile and ready to use in a wide variety of shapes, materials, sizes, and cap types.

Choose from seven styles:

- ▶ Corning® round Polystyrene (PS) low profile bottles with easy grip design for superior handling and stability
- ▶ Costar® traditional Polystyrene (PS) storage bottles with smooth sides
- ▶ Corning square Polycarbonate (PC) bottles are break resistant and autoclavable or microwavable
- ▶ Corning octagonal Polyethylene Terephthalate (PET) storage bottles
- ▶ Corning square Polyethylene Terephthalate (PET) storage bottles
- ▶ Corning Gosselin™ High Density Polyethylene (HDPE) storage bottles
- ▶ PYREX® glass storage bottles

## Physical Properties of Corning Plastic Bottles

	Chemical Resistance		Sterilization	Thermal Durability
	Recommended	Not Recommended		
Polystyrene Bottles	Weak acids, strong alkali, alcohols	Strong acids, ketones, aliphatic, aromatic, and chlorinated hydrocarbons	Do not autoclave	80°C
Polycarbonate Bottles	Weak acids, weak alkali, alcohols	Strong acids, strong alkali, ketones, aliphatic, aromatic, and chlorinated hydrocarbons	Autoclave once	135°C
Polyethylene Terephthalate Bottles	Weak acids	Strong acids, ketones, aliphatic, aromatic, and chlorinated hydrocarbons	Do not autoclave	50°C
High Density Polyethylene Bottles/Caps	Acids, alkali, aldehydes, solvents, alcohol, oils	Aliphatic, aromatic, and chlorinated hydrocarbons, oxidizing acids	Do not autoclave	120°C



Corning easy grip round PS storage bottles



Costar round PS storage bottles



Corning square PC storage bottles



PYREX round glass storage bottles

## Comparison of Corning® Plastic Storage Bottles

	Corning Easy Grip Round PS Storage Bottles	Costar® Round PS Storage Bottles	Corning Square PC Storage Bottles	Corning Square PET Storage Bottles	Corning Octagonal PET Storage Bottles	Corning Gosselin™ HDPE Storage Bottles
Bottle material	PS	PS	PC	PET	PET	HDPE
Cap color	Orange	Red	Orange	Orange	White	Red, White
Cap material (maximum temperature)	HDPE (121°C)	HDPE (121°C)	PP (140°C)	HDPE (121°C)	HDPE (121°C)	HDPE (121°C)
Autoclavable† (121°C, 15 psi, 20 mins.)	No	No	Yes, once†	No	No	No
Maximum recommended working temperature	70°C	70°C	130°C	50°C	50°C	120°C
Minimum recommended working temperature	-20°C*	-20°C*	-80°C*	-40°C*	-40°C*	-80°C*
Use with Corning vacuum filters	Recommended	Recommended	No	No	No	No
Available sizes	150 mL, 250 mL, 500 mL, and 1L	125 mL, 250 mL, 500 mL, and 1L	125 mL, 250 mL, 500 mL, and 1L	125 mL, 250 mL, 500 mL, and 1L	30 mL, 60 mL, 125 mL, 250 mL, 500 mL, and 1L	150 mL, 250 mL, 500 mL, 1L, 2L, and 2.5L
Dry heat sterilization	No	No	No	No	No	No
Maximum recommended storage temperature	64°C to 80°C	64°C to 80°C	138°C to 143°C	50°C	50°C	120°C
Freezing	-20°C	-20°C	-80°C	-40°C	-40°C	-80°C
CO <sub>2</sub> gas permeability	High	High	Medium	Medium	Medium	Medium
Shatter resistance	Medium	Medium	High	High	High	High
Microwave with aqueous liquid	No	No	Yes	No	No	No
pH stability	Short	Short	Medium	Good	Good	Good

PS = Polystyrene, PC = Polycarbonate, PET = Polyethylene Terephthalate, HDPE = High Density Polyethylene, PP = Polypropylene.

†Autoclaving will reduce mechanical strength.

\*Bottle performance in freezers depends on both the temperature and contents in the bottle. It is strongly recommended that a trial run be performed under actual conditions to test the suitability of the bottles for frozen storage.



Corning square PET storage bottles



Corning octagonal PET storage bottles



Corning Gosselin square HDPE storage bottles



Corning Gosselin round HDPE storage bottles



Corning low profile easy grip style storage bottles



Costar traditional style storage bottles



Corning Bottle top vacuum filters

## Corning® PS Storage Bottles

- ▶ Disposable polystyrene bottles for storage of media, buffers, and other aqueous solutions
- ▶ Corning low profile style has easy grip sides that facilitate handling
- ▶ Costar® traditional style has smooth sides
- ▶ Plug seal caps (45 mm) provide an airtight seal and help minimize the risk of contamination.
- ▶ Bottles can be used with Corning vacuum filtration systems with 45 mm neck sizes (see Accessories).
- ▶ Sterile
- ▶ Nonpyrogenic

### Corning Low Profile Easy Grip Style

Cat. No.	Volume	Neck Diam. (mm)	Qty/Pk	Qty/Cs
431175	150 mL	45	2	24
430281	250 mL	45	2	24
430282	500 mL	45	2	24
430518	1L	45	2	24

### Costar Traditional Style

8388	125 mL	45	1	24
8390	250 mL	45	1	12
8393	500 mL	45	1	12
8396	1L	45	1	12

## Accessories for PS Storage Bottles

### Corning Bottle Top Vacuum Filters

- ▶ Three sizes: 150 mL, 500 mL, and 1 L
- ▶ Low liquid retention funnel design
- ▶ Prefilters must be ordered separately
- ▶ Individually packaged
- ▶ Sterile
- ▶ Nonpyrogenic

### 150 mL Capacity, 42 mm Square Membrane

Cat. No.	Membrane	Volume (mL)	Neck Size (mm)	Pore Size (µm)	Qty/Cs
430626	CA	150	45	0.22	48
430627	CA	150	45	0.45	48
431161	PES	150	45	0.22	48

### 500 mL Capacity, 63 mm Square Membrane

430049	NY	500	45	0.20	12
430513	CA	500	45	0.22	12
430514	CA	500	45	0.45	12
431118	PES	500	45	0.22	12

### 1,000 mL Capacity, 79 mm Square Membrane

430015	CA	1,000	45	0.22	12
431174	PES	1,000	45	0.22	12

CA = Cellulose Acetate, NY = Nylon, PES = Polyethersulfone.

**Warning:** Use of vacuum-driven filters on glass or plastic bottles may cause personal injury if they implode during use. Only bottles specifically designed for these applications should be used. See Corning Cell Culture Product Selection Guide (CLS-CC-010) for additional precautions or contact Corning Scientific Support.





### Corning® Square PC Storage Bottles

- ▶ Strong, easier to handle, require less space (13% to 20%) on the shelf or in the autoclave
- ▶ Ideal for mixing, sampling, and storage
- ▶ More break-resistant than glass or other plastic bottles
- ▶ Linerless, 45 mm one-piece autoclavable orange GL 45 threaded polypropylene plug seal cap
- ▶ Screened white enamel graduations are easier to see than molded graduations
- ▶ Bottles can be autoclaved once at 121°C and 15 psi. Repeated autoclaving weakens polycarbonate and is not recommended.
- ▶ Store up to -80°C
- ▶ Sterile

Cat. No.	Volume	Bottle Shape	Material	Neck Diam. (mm)	Qty/Bag	Qty/Cs
431430	150 mL	Square	PC	45	1	24
431431	250 mL	Square	PC	45	1	24
431432	500 mL	Square	PC	45	1	24
431433	1L	Square	PC	45	1	24

### Accessory Caps and Septa for Square PC Bottles

Corning offers reusable GL 45 septa caps for these storage bottles with a choice of silicone septa or PTFE-faced silicone septa.



Cat No.	Description	Thread Finish	Qty/Cs
1395-45HTSC	Cap, open top PBT high temperature	GL 45	10
1395-45SS	Septa, silicone	NA	10
1395-45TS	Septa, PTFE-faced silicone	NA	10

PBT = Polybutylene Terephthalate

**NOTE:** Most GL 45 threaded caps designed for glass storage bottles use a different sealing design and will not give a secure seal if used on these plastic bottles.

**CAUTION:** These square polycarbonate bottles should NOT be used with bottle top filter units or in other applications involving vacuum pressure, as breakage may occur. DO NOT tighten caps immediately after autoclaving as the vacuum resulting from cooling can cause breakage.

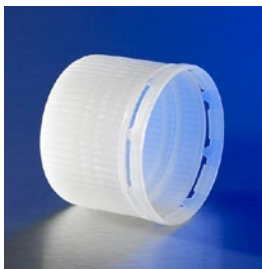
### Corning Square PET Storage Bottles

- ▶ Good for storage of media, buffers and other aqueous solutions
- ▶ Available in four sizes: 125 mL, 250 mL, 500 mL, and 1L
- ▶ Screened white enamel graduations are easier to read than molded graduations
- ▶ Large white marking spot for easier identification
- ▶ Bottles are validated USP Class VI, noncytotoxic, and nonpyrogenic
- ▶ Individually packaged bottles have Sterility Assurance Level (SAL) of 10<sup>-6</sup>



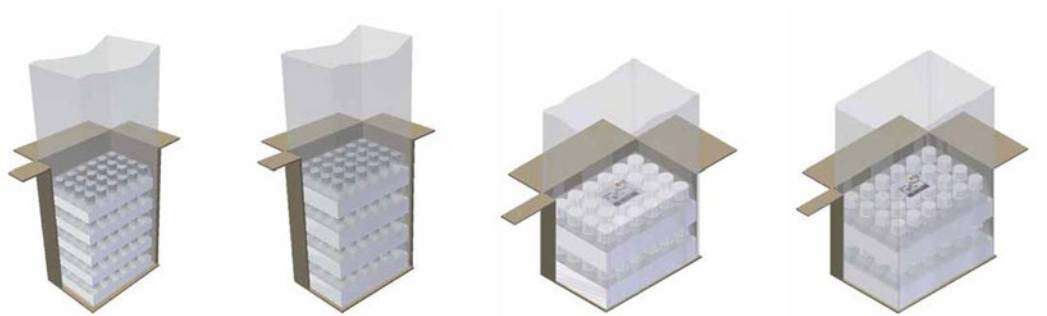
Cat. No.	Volume	Thread Finish	Approx. Diam. x Height (mm)	Grad. Range (mL)	Grad. Interval (mL)	Qty/Pk	Qty/Cs
431530	125 mL	GL 45	52.5 x 106.5	50 - 125	25	12	24
431531	250 mL	GL 45	59 x 142.5	50 - 250	25	12	24
431532	500 mL	GL 45	77 x 176	100 - 500	50	12	24
431533	1L	GL 45	92 x 216.5	100 - 1000	50	12	24

## Corning® Octagonal PET Bottles



Tamper-evident screw cap

- ▶ Triple-bagged PET Bottles for clean room applications. Bottles are packaged in convenient, shrink-wrapped trays within an outer bag to ensure cleanliness.
- ▶ High leak-proof performance bottles for controlled environment
- ▶ Triple bagged: shrink wrapped tray and two outer bags
- ▶ Innovative HDPE screw cap is validated against IATA standards to ensure leak-proof air transport conditions (sizes 125 mL through 1L)
- ▶ Bottles have Sterile Assurance Level (SAL) of  $10^{-6}$
- ▶ Break resistant
- ▶ Transparency equivalent to glass
- ▶ Molded graduations
- ▶ Ergonomic handling
- ▶ Bottles are validated USP Class VI noncytotoxic, nonhemolytic, nonpyrogenic



Cat. No.	Volume	Screw Cap Color	Neck Diam. (mm)	Qty/Tray	Qty/Cs
431729	30 mL	Natural	18	24	120
432229	30 mL	Natural	18	24	240
431730	60 mL	Natural	18	24	96
432230	60 mL	Natural	18	24	192
431731	125 mL	Natural	31.7	24	48
432331	125 mL	Natural*	31.7	24	48
432231	125 mL	Natural*	31.7	24	96
431732	250 mL	Natural	31.7	24	48
432332	250 mL	Natural*	31.7	24	48
432232	250 mL	Natural*	31.7	24	72
431733	500 mL	Natural	31.7	12	24
432333	500 mL	Natural*	31.7	12	24
432233	500 mL	Natural*	31.7	12	48
431734	1L	Natural	31.7	12	24
432334	1L	Natural*	31.7	12	24
432234	1L	Natural*	31.7	12	24

\*Screw cap validated against IATA



### Corning Gosselin™ HDPE Storage Bottles

- ▶ High-density polyethylene (HDPE) bottles
- ▶ Break-resistant
- ▶ Bulk packed in one folded outer bag
- ▶ Other cap colors are available for certain products
- ▶ Sterility Assurance Level (SAL) of 10<sup>-3</sup>

#### Square, Wide Neck

Cat. No.	Volume	Screw Cap Color	Height (mm)	Screw Cap (mm)	Sterile	Qty/Cs
LC150A-05	150 mL	Red	95	37	Yes	300
LC250-06	250 mL	Red	109	37	Yes	210
LC500-11	500 mL	Red	122	58	Yes	175
LC1000-13	1L	Red	185	58	Yes	90
LC2000-03	2L	Red	230	58	Yes	50
LC2500A-09	2.5L	White	262.7	77	Yes	35



#### Round, Wide Neck

Cat. No.	Volume	Screw Cap Color	Height (mm)	Screw Cap (mm)	Sterile	Qty/Cs
LR50A-18	50 mL	Red	77	27	Yes	600
LR100-12	100 mL	Red	80	37	Yes	335
LR150A-14	150 mL	Red	108	37	Yes	250
LR250-09	250 mL	Red	125	37	Yes	145
LR500-04	500 mL	Red	136	58	Yes	140
LR1000-08	1L	Red	174	58.	Yes	68



Square bottle 1L, HDPE

### 1395 PYREX® Bottle, Media, Storage, Screw Cap

Heavy duty bottle which can be used for storage as well as mixing and sampling. Includes linerless, one-piece autoclavable polypropylene plug seal cap with drip free pouring rings. Optional red PBT caps and red ETFE pouring rings are available for dry heat sterilization (180°C). Glass bead indicates full capacity line on 100 mL through 2L size. Bottles have permanent white enamel graduations and marking spots. Color-coded polypropylene caps are available in a choice of orange, green, purple, red, and light gray.



Cat. No.	Approx. Capacity (mL)	Thread Finish	Approx. O.D. x Height (mm)	Grad. Range (mL)	Grad. Increment (mL)	Qty/Cs
1395-25	25	GL 25	36.5 x 70	10-25	5	10
1395-50	50	GL 32	46 x 88	20-50	10	10
1395-100	100	GL 45	56 x 100	40-80	20	10
1395-150	150	GL 45	50 x 125	62-110	25	10
1395-250	250	GL 45	70 x 138	50-200	50	10
1395-500	500	GL 45	86 x 176	100-400	100	10
1395-750	750	GL 45	95 x 203	100-600	100	10
1395-1L	1,000	GL 45	101 x 225	100-900	100	10
1395-2L	2,000	GL 45	136 x 262	400-1800	200	10
1395-3X	3,500	GL 45	160 x 295	500-3000	500	10
1395-5L	5,000	GL 45	186 x 335	500-4500	500	1
1395-10L	10,000	GL 45	234 x 410	2000-9000	1000	1



## 1395 PYREX Bottle, Storage, Screw Caps



Cat. No.	Description	Thread Finish	Qty/Cs
1395-45DC	Delivery cap, 3-hole, red, PBT	GL 45	1
1395-32HTC	Cap, red, high temperature, with PTFE liner	GL 32	10
1395-45HTC	Cap, red, high temperature, with PTFE liner	GL 45	10
1395-32LTC	Cap, orange	GL 32	20
1395-45LTC	Cap, orange	GL 45	20
1395-32LTR	Ring, clear	GL 32	50
1395-45LTR	Ring, clear	GL 45	50
1395-45HTR	Pouring ring, ETFE, high temperature	GL 45	50
1395-45LTC1	Cap, purple	GL 45	20
1395-45LTC2	Cap, light gray	GL 45	20
1395-45LTC3	Cap, green	GL 45	20
1395-45LTMC	Cap, gray membrane	GL 45	10
1395-25HTSC	Cap, open top, PBT, high temperature	GL 25	10
1395-32HTSC	Cap, open top, PBT, high temperature	GL 32	10
1395-45HTSC	Cap, open top, PBT, high temperature	GL 45	10
1395-25SS	Septa, silicone	GL 25	10
1395-32SS	Septa, silicone	GL 32	10
1395-45SS	Septa, silicone	GL 45	10
1395-25TS	Septa, PTFE faced silicone	GL 25	10
1395-32TS	Septa, PTFE faced silicone	GL 32	10
1395-45TS	Septa, PTFE faced silicone	GL 45	10

ETFE = Ethylene Tetrafluoroethylene, PBT = Polybutylene Terephthalate

**CAUTION:** Bottles larger than 2L should NOT be used with bottle top filter units, or in other applications involving vacuum pressure, as breakage may occur. DO NOT have caps tightened immediately after autoclaving, as the vacuum resulting from cooling can cause breakage. A pouring ring is not included on 25 mL size. A vented cap is NOT recommended for use on the 5L and 10L 1395 series bottle. See Corning Cell Culture Product Selection Guide (CLS-CC-010) for additional precautions or contact Corning Scientific Support.

## 1396 PYREX® Bottle, Media Storage, Screw Cap, Graduated, Square



Manufactured from PYREX borosilicate glass for chemical and thermal resistance. Square bottles are easier to handle, require less space (13% to 20%) on the shelf or in the autoclave and are ideal for mixing, sampling, and storage. Features include white enamel graduations, large marking spot and a glass ridge molded into the bottle to indicate full capacity. Includes linerless, one-piece, autoclavable, orange, polypropylene plug seal cap with drip-free pouring ring. A wide range of optional caps are available under the catalog 1395 series.

Cat. No.	Approx. Capacity (mL)	Thread Finish	Approx. O.D. x Height (mm)	Grad. Range (mL)	Grad. Increment (mL)	Qty/Cs
1396-100	100	GL 32	50 x 105	40-80	20	10
1396-250	250	GL 45	64 x 138	50-200	50	10
1396-500	500	GL 45	78 x 176	100-400	100	10
1396-1L	1,000	GL 45	94 x 217	100-900	100	10

**CAUTION:** Do NOT have caps tightened immediately after autoclaving as the vacuum resulting from cooling can cause breakage. Not applicable for vacuum use.

### 1399 PYREX Slim Line Storage Bottle



Round media bottles can be used for storage as well as mixing. The indented side grips ensure easy handling. The bottles are graduated to their full working volume. The narrow profile uses less space on shelves, refrigerators, and autoclaves. The new style cap has wider knurls for a more comfortable grip. It also requires 1/3 less turns to secure a closure. Not recommended for use under vacuum.

Cat. No.	Approx. Capacity (mL)	Approx. O.D. x Height (mm)	Thread Finish	Qty/Cs
1399-125	125	55 x 124	GL 45	4
1399-250	250	66 x 158	GL 45	4
1399-500	500	78 x 193	GL 45	4
1399-1L	1,000	93 x 253	GL 45	4

### 61500 PYREXPLUS® Bottle, Reagent, Narrow Mouth, Protective Coating, PYREX § Stopper



Features a protective PVC coating for longer product life and safety. Protective coating helps prevent glass from shattering and reduces spills. Autoclavable (121°C) and resistant to thermal shock. Bottle has a ground neck with a § stopper.

Cat. No.	Description	Approx. Capacity (mL)	§ Stopper No.	Approx. O.D. x Height (mm)	Qty/Pk	Qty/Cs
61500-125	Complete	125	19	55 x 136	6	12
61500-250	Complete	250	19	70 x 160	1	6
61500-500	Complete	500	24	86 x 198	1	6
61500-1L	Complete	1,000	29	107 x 235	1	6
61500-2L	Complete	2,000	29	133 x 282	—	1

For stopper only, order Corning Cat. No. 7575.

**WARNING:** Do not place over direct heat or flame. Do not heat above 121°C moist heat or 110°C dry heat. Not recommended for dry heat sterilization. Will melt.

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1395-32HTC	9	1395-150	8	430513	5	431732	7	LC500-11	8
1395-32HTSC	9	1395-250	8	430514	5	431733	7	LC1000-13	8
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For a complete list of Corning storage bottles, visit [www.corning.com/lifesciences](http://www.corning.com/lifesciences).

**Warranty/Disclaimer:** Unless otherwise specified, all products are for research use or general laboratory use only.\* Not intended for use in diagnostic or therapeutic procedures. Not for use in humans. These products are not intended to mitigate the presence of microorganisms on surfaces or in the environment, where such organisms can be deleterious to humans or the environment. Corning Life Sciences makes no claims regarding the performance of these products for clinical or diagnostic applications. \*For a listing of US medical devices, regulatory classifications or specific information on claims, visit [www.corning.com/resources](http://www.corning.com/resources).

*Corning's products are not specifically designed and tested for diagnostic testing. Many Corning products, though not specific for diagnostic testing, can be used in the workflow and preparation of the test at the customers discretion. Customers may use these products to support their claims. We cannot make any claims or statements that our products are approved for diagnostic testing either directly or indirectly. The customer is responsible for any testing, validation, and/or regulatory submissions that may be required to support the safety and efficacy of their intended application.*

## CORNING

Corning Incorporated  
Life Sciences

[www.corning.com/lifesciences](http://www.corning.com/lifesciences)

**NORTH AMERICA**  
t 800.492.1110  
t 978.442.2200

**ASIA/PACIFIC**  
**Australia/New Zealand**  
t 61 427286832  
**Chinese Mainland**  
t 86 21 3338 4338

**India**  
t 91 124 4604000  
**Japan**  
t 81 3-3586 1996  
**Korea**  
t 82 2-796-9500  
**Singapore**  
t 65 6572-9740  
**Taiwan**  
t 886 2-2716-0338

**EUROPE**  
CEurope@corning.com  
**France**  
t 0800 916 882  
**Germany**  
t 0800 101 1153  
**The Netherlands**  
t 020 655 79 28  
**United Kingdom**  
t 0800 376 8660

**All Other European Countries**  
t +31 (0) 206 59 60 51

**LATIN AMERICA**  
grupoLA@corning.com  
**Brazil**  
t 55 (11) 3089-7400  
**Mexico**  
t (52-81) 8158-8400