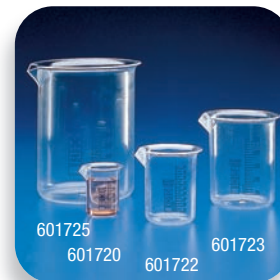
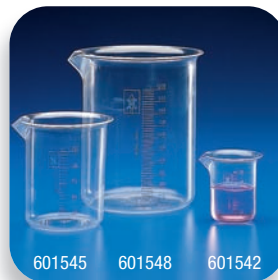




**Low Form
Griffin-Style Beakers**
Mix, Measure and Prepare
Solutions



Ordering Information / Specifications

Available in single quantities. To order, add "-1" to the end of the item code (i.e., 601801-1, 601821-1)

Capacity	Qty/Box	Polypropylene (PP)		Polymethylpentene (PMP)		Graduation Range (mL)	Graduation Intervals (mL)	Tolerance	Height (mm)	O.D. (mm)	Wall Thickness (mm)
		Molded Graduations Item #	Printed Graduations Item #	Molded Graduations Item #	Printed Graduations Item #						
25 mL	20	601801	601821	601541	601720	5 – 25	1	+/- 10%	49	34	1.3
50 mL	20	601802	601822	601542	601721	10 – 50	2	+/- 10%	60	41	1.3
100 mL	12	601803	601823	601543	601722	20 – 100	5	+/- 10%	72	51	1.5
250 mL	16	601805	601824	601545	601723	50 – 250	10	+/- 10%	95	71	1.7
500 mL	12	601806	601825	601546	601724	100 – 500	10	+/- 10%	119	87	1.8
1000 mL	4	601808	601826	601548	601725	100 – 1000	20	+/- 10%	147	109	1.8
2000 mL	4	601809	601827	601549	601726	200 – 2000	50	+/- 10%	183	132	1.8
3000 mL	2	600811	600818	601330	601727	1000 – 3000	500	+/- 10%	201	158	2.5
5000 mL	2	600812	600819	601331	601728	1000 – 5000	500	+/- 10%	229	188	2.5

Note: PP and PMP beakers can be autoclaved repeatedly at 121°C/15psi. Cycle length should be at least 15 minutes at 121°C to ensure sterility. PP and PMP beakers are not intended to be used over an open flame.

Tolerated temperature range in normal use:

PP: -10°C to +120°C, 140°C temperature limits can be tolerated for short intervals only.

PMP: 0°C to +170°C, 180°C temperature limits can be tolerated for short intervals only.



“As a lab manager, I have increased the safety of sample prep by using plastic beakers, funnels, cylinders and bottles as an alternative to glassware.

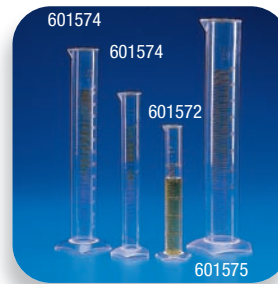
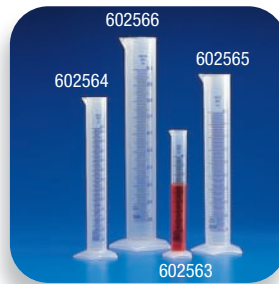
Reusable plasticware not only improves safety it also helps maintain cost control and improve throughput with exacting performance.”

Graduated Cylinders

Accurately Measure Liquids with No Concave Menisci

These high quality graduated cylinders are ideal for precision measurement. The cylinders are chemically non-absorbent and are chemically cleaner than glass. The no-wetting interior surface prevents the formation of concave menisci thereby assuring accurate measurements. Switch to plastic cylinders as an alternative to glass to greatly reduce breakage and the potential for injury.

- Cylinders have molded graduation marks or easy-to-read printed graduation marks
- Available in unbreakable translucent polypropylene (PP) or clear shatter-resistant Polymethylpentene (PMP)
- A tapered pour spout facilitates the transferring of liquids without dripping
- Pentagon-shaped base provides stability
- Withstands repeated autoclaving



Ordering Information / Specifications

Available in single quantities. To order, add “-1” to the end of the item code (i.e., 601075-1, 602560-1)

Capacity	Qty/Box	Polypropylene (PP)				Polymethylpentene (PMP)				Graduation Range (mL)	Graduation Intervals (mL)	Class B* Tolerance (mL)
		Molded Graduations Item #	Printed Graduations Item #	Height (mm)	O.D. (mm)	Molded Graduations Item #	Printed Graduations Item #	Height (mm)	O.D. (mm)			
10 mL	10	601075	602560	140	13.5	601541	602570	139	13.5	2 – 10	0.2	+/- 0.2
25 mL	30	601077	602561	195	18.5	601542	602571	195	18.5	5 – 25	0.5	+/- 0.5
50 mL	30	601078	602562	199	25.5	601543	602572	199	25.5	10 – 50	1.0	+/- 1.0
100 mL	30	601079	602563	249	30.5	601545	602573	249	30.5	10 – 100	1.0	+/- 1.0
250 mL	12	601080	602564	315	41.5	601546	602574	315	41.5	20 – 250	2.0	+/- 2.0
500 mL	12	601081	602565	361	55	601548	602575	361	55	50 – 500	5.0	+/- 5.0
1000 mL	6	601082	602566	439	66	601549	602576	438	66	100 – 1000	10	+/- 10
2000 mL	2	601094	602567	531	84	601330	602577	531	84	200 – 2000	20	+/- 20

Note: PP and PMP cylinders can be autoclaved repeatedly at 121°C/15psi. Cycle length should be at least 15 minutes at 121°C to ensure sterility. PP and PMP cylinders are not intended to be used over an open flame.

Tolerated temperature range in normal use:

PP: -10°C to +120°C, 140°C temperature limits can be tolerated for short intervals only.

PMP: 0°C to +170°C, 180°C temperature limits can be tolerated for short intervals only.

*Class B indicates the tolerance of the graduation marks in accordance with ISO 6706 and BS 5404.

Powder Funnels

Wide Bore for the Transfer of Particles



Fast and efficient funnels ideal for use with powders, large particles and viscous liquids. Excellent chemical resistance. Funnels can withstand temperatures up to 120°C and may be autoclaved.

- Made from heavy-duty polypropylene
- Outer ribs to prevent airlock
- Angled at exactly 60° for rapid filtration
- Large opening reduces the bridging of powders

Ordering Information / Specifications

Size	Item #	Qty/Box	Top I.D. (mm)	Stem I.D. (mm)	Stem Length (mm)
60 mm	600171	20	60	15	20
80 mm	600167	20	80	15	22
100 mm	600168	20	100	25	25
120 mm	600169	10	120	30	27
150 mm	600170	10	150	36	40
180 mm	600166	5	180	43	49

Analytical Funnels

Long Narrow Stem Ideal for Liquid Transfer



These funnels are designed specifically for analytical chemistry filtration. Long, narrow stems make these funnels ideal for liquids. Funnels can withstand temperatures up to 120°C and may be autoclaved.

- Funnels are angled at exactly 60° to expedite filtration
- Outer ribs to prevent airlock
- Funnels have inner ribs and accept standard size filter paper

Ordering Information / Specifications

Size	Item #	Qty/Box	Capacity (mm)	Stem Length (mm)	Stem O.D. (mm)
27 mm	600145	20	3.5	27	4
37 mm	600146	20	10	37	5
46 mm	600147	20	20	46	5
66 mm	600148	20	50	66	10
81 mm	600150	20	100	81	11
100 mm	600152	10	200	100	11
120 mm	600153	10	350	120	11
150 mm	600155	10	700	150	14
183 mm	600156	5	1250	183	14

Draining Rack

Stain-Resistant Durable Rack



This durable drying system is made from high-impact polystyrene (HIPS) to provide a sturdy structure for draining plastic and glass labware. The pegs can accommodate items with a neck bore in excess of 15mm. Optional smaller pegs are available for small diameter items such as test tubes. This system will not rust or stain.

The peg holes are closed eliminating the potential for leakage and consequent biohazards.

Rack system includes:

- 72 interchangeable pegs
- Drip channel with draining hose
- Mounting kit and template for hanging
- Hooks for coupling additional racks

Ordering Information / Specifications

Product	Item #	Qty/Box	Rack Dimensions Length	Peg Dimensions Length / Diameter
Rack with 72 pegs	600213	1 ea	450 x 630 x 110 mm (17.7" x 24.8" x 4.3")	95 mm x 15 mm (3.7" x 0.6")
Small pegs (pack of 11)	601213	1 ea		95 mm x 6 mm (3.7" x 0.2")



REUSABLE BOTTLES

Suitable for general-purpose use, laboratory sampling and food packaging and transport

High Quality Plastic Bottles Suitable for Food Packaging and Transport

The bottles are manufactured using polypropylene and polyethylene blends using the exacting properties of each polymer to engineer lightweight, highly chemical resistant products. Various shapes with unique bottle closures provide an array of products to choose from to meet your application needs.

Manufactured under the guidelines of ISO 9001:2000, the graduated bottles conform to EC/93/8 and EC/93/9 and can serve the food and food transportation industries.

We offer both wide-neck and narrow-neck bottles in various sizes ranging from 25 mL (0.9 oz) to 2000 mL (67.6 oz). The following pages provide detailed descriptions with application guidelines to help with the selection of the right bottle to fit your application.

Engineered leak-resistant bottle closures not only protect contents from outside contaminants, their molded-edge contour allows for easy gripping with gloves and for automatic filling equipment. Some bottle products offer a separate insert plug designed into the cap for confidential

notes and for added leak protection. Others offer molded-in holes in the cap and bottle body to tag products for identification and to secure contents with wire seals.

Considerations when selecting plastic bottles

- Consider how temperature, density and molding will affect the type of materials held within.
- LDPE (low-density polyethylene) plastic bottles offer added flexibility and HDPE (high-density polyethylene) plastic bottles are known to withstand impact and have moisture resistance properties.
- Consider the physical properties of bottles – a wide mouth or narrow neck bottle – how do they positively or negatively affect the use of the contents?
- Permeability (sorption) of plastics affect flavor management, safety and shelf life.
- Does the bottle contents need to undergo a sterilization process? If so, be sure to check the sterilization guides on page 10.

Decide which factors are the most important to your particular need.

Each content is unique and testing is the only method to truly know which bottle choice is the best for your product.

Consider Plastic Bottles to Help Improve the Plant

Plastics have become a preferred packing material for many reasons, including substantial environmental benefits. Plastics help make packaging more efficient, thereby conserving resources. Plastic bottles must protect their contents at low cost and ease of use with minimal environmental impact. And the package must meet the various regulatory requirements set by various governments. Plastic bottles offers a lightweight alternative to other products making it more efficient with lighter shipping loads and fewer trucks on the highways, helping to reduce transportation fuel and greenhouse gas emissions. See Globe Scientific's wide-neck square bottles for efficient storage and packaging.

Wide-Neck Round Bottles

Flexible, General-Purpose Bottles with Easy-Grip, Leak-Resistant Caps



Bottle **Polyethylene (PE)**
Cap **Polypropylene (PP)**

These wide-neck bottles are designed for easy filling and emptying of liquid and powder samples. The bottles are ideal for sample storage as well as for raw materials and commodities packaging. The durable bottle and cap can withstand considerable pressure before rupture, making them ideal for transport. The easy-grip, leak-resistant, deep-threaded screw cap features tagging points to add security. Confidential notes can be placed in the

space between the insert seal plug and cap.

- Molded graduations for reproducible filling
- Easy-grip, deep thread cap
- Separate insert sealing plug provides additional leak resistance
- Molded-in holes in the cap and body accommodate wire security seals and identification tags
- Packaged in lot coded cartons suitable for the food industry*

Ordering Information / Specifications

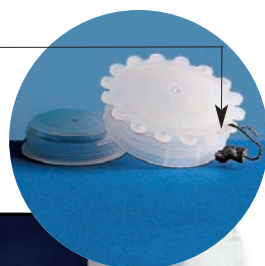
Capacity	Item #	Qty/Box	Height (mm)	Bottle O.D. (mm)	Mouth I.D. (mm)	Graduation (mL)
50 mL (1.7 oz)	600408	100	77	40	24	10
100 mL (3.4 oz)	600409	100	89	48	24	20
250 mL (8.5 oz)	600410	50	126	61	34.5	25
500 mL (16.9 oz)	600411	20	158	75	34.5	50
1000 mL (33.8 oz)	600412	20	200	93	45	100
2000 mL (67.6 oz)	600413	20	247	115	45	100

Note: Bottles can be sterilized by gamma irradiation, ethylene oxide (EtO), microwaves and chemical disinfectant. Not autoclavable.
Tolerated temperature range in normal use: -40°C to +82°C.
90°C temperature limits can be tolerated for short intervals only.

Wide-Neck Square Bottles

Space-Saving Storage Bottles Perfect for Packaging Buffers and Reagents

Cap has loops that allow security tagging to bottle body



Bottle **Polyethylene (PE)**
Cap **Polypropylene (PP)**

These space-saving square bottles are ideal for long-term storage of samples as well as for raw materials and commodities packaging. Molded graduations allow reproducible filling without the use of cylinders and beakers. The easy-grip caps can be wired down for security. Head space between cap and insert plug can be used for confidential notes. Engineered from both low-density and high-density polyethylene to create a flexible, yet rigid

bottle. Excellent for frequent sterilization.

- Molded graduations for reproducible filling
- Easy-grip, deep thread cap
- Molded-in holes in the cap and body accommodate wire security seals and identification tags
- Separate insert sealing plug provides additional leak resistance
- Packaged in lot coded cartons suitable for the food industry*

Ordering Information / Specifications

Capacity	Item #	Qty/Box	Dimensions (mm)	Mouth I.D. (mm)	Graduation (mL)
25 mL (0.9 oz)	600608	100	32 x 34 x 52	18	5
50 mL (1.7 oz)	600609	100	38 x 38 x 70	24	10
100 mL (3.4 oz)	600610	100	42 x 48 x 90	34.5	20
250 mL (8.5 oz)	600611	50	57 x 60 x 110	34.5	50
500 mL (16.9 oz)	600612	25	70 x 80 x 138	45	100
1000 mL (33.8 oz)	600613	20	80 x 103 x 176	58	100
2000 mL (67.6 oz)	600614	20	100 x 134 x 210	58	100

Note: Bottles can be sterilized by gamma irradiation, ethylene oxide (EtO), microwaves and chemical disinfectant. Not autoclavable.
Tolerated temperature range in normal use: -40°C to +82°C.
90°C temperature limits can be tolerated for short intervals only.

Wide-Neck Round Bottle with Leak-Resistant Cap

Flexible, General-Purpose Bottle



Bottle **Low-Density Polyethylene (LDPE)**
Cap **Polypropylene (PP)**

bottle is designed to grant high stability during filling.

- Molded graduations for reproducible filling
- Easy-grip cap
- Packed in lot-coded cardboard cartons suitable for the food industry*

Ordering Information / Specifications

Capacity	Item #	Qty/Box	Height (mm)	Bottle O.D. (mm)	Mouth I.D. (mm)	Graduation (mL)	DIN #**
50 mL (1.7 oz)	601608	100	88	38	24	10	GL32
100 mL (3.4 oz)	601610	100	105	48	24	20	GL32
250 mL (8.5 oz)	601612	50	140	60	38	25	GL45
500 mL (16.9 oz)	601614	25	170	75	38	100	GL45
1000 mL (33.8 oz)	601616	17	206	95	55	100	GL63
2000 mL (67.6 oz)	601618	15	252	120	55	100	GL63

Note: Bottles can be sterilized by gamma irradiation, ethylene oxide (EtO), microwaves and chemical disinfectant. Not autoclavable.

Tolerated temperature range in normal use: -50°C to +75°C

90°C temperature limits can be tolerated for short intervals only.

**Leak-tight caps and bottle necks conform to DIN 13316 and 168 guidelines.

Wide-Neck Round Bottles with Leak-Resistant Cap

Extra Sturdy, General-Purpose Bottles



Bottle **Polypropylene (PP)**

These sturdy, transparent, high quality polypropylene graduated bottles meet food and drug regulations with pictogram proof on the bottom of each container.

The wide-neck opening allows for easy filling and emptying. These rupture-resistant bottles have deep-threaded pinch seals.

These leak-resistant closures are suitable for the transportation of liquid and powder

products. Tagging points on the bottle shoulder and cap ensures tamper-resistance closure.

- Molded graduations for reproducible filling
- Easy-grip cap
- Packed in lot-coded cardboard cartons suitable for the food industry*

Ordering Information / Specifications

Capacity	Item #	Qty/Box	Height (mm)	Bottle O.D. (mm)	Mouth I.D. (mm)	Graduation (mL)	DIN #**
50 mL (1.7 oz)	601621	100	88	38	24	10	GL32
100 mL (3.4 oz)	601623	100	105	48	24	20	GL32
250 mL (8.5 oz)	601625	50	140	60	38	25	GL45
500 mL (16.9 oz)	601627	25	170	75	38	100	GL45
1000 mL (33.8 oz)	601629	17	206	95	55	100	GL63
2000 mL (67.6 oz)	601631	15	252	120	55	100	GL63

Note: Bottles are autoclavable without cap. PP can be autoclaved repeatedly at 121°C/15psi.

Cycle length should be at least 15 minutes at 121°C to ensure sterility.

Tolerated temperature range in normal use: -50°C to +75°C.

90°C temperature limits can be tolerated for short intervals only.

**Leak-tight caps and bottle necks conform to DIN 13316 and 168 guidelines.

Narrow-Mouth Round Bottles

Flexible, General-Purpose
Bottles Ideal for Oils



Bottle **Low-Density Polyethylene (LDPE)**
Cap **Polypropylene (PP)**

These graduated general-purpose bottles have double sealing closures with an insert cap to assure tightness. Sloping shoulders reduce the tendency for residue deposits, making these bottles ideal for oils. Tagging points on the bottle shoulder and cap ensures tamper-resistance closure.

- Molded graduation
- Easy-grip cap
- Molded-in holes in the cap and body accommodate wire security seals and identification tags
- Packed in lot-coded cardboard cartons suitable for the food industry*

Ordering Information / Specifications

Capacity	Item #	Qty/Box	Height (mm)	Bottle O.D. (mm)	Mouth I.D. (mm)	Graduation (mL)	DIN #**
50 mL (1.7 oz)	600317	100	77	39	18.5	10	GL32
125 mL (5.1 oz)	600319	100	115	46	18.5	20	GL32
250 mL (8.5 oz)	600323	50	137	60	23	25	GL45
500 mL (16.9 oz)	600324	25	165	74	23	50	GL45
1000 mL (33.8 oz)	600325	20	213	93	34.5	100	GL63
2000 mL (67.6 oz)	600326	20	273	116	34.5	100	GL63

Note: Bottles can be sterilized by gamma irradiation, ethylene oxide (EtO), microwaves and chemical disinfectant. Not autoclavable.

Tolerated temperature range in normal use: -50°C to +75°C.

90°C temperature limits can be tolerated for short intervals only.

**Leak-tight caps and bottle necks conform to DIN 13316 and 168 guidelines.

Narrow-Neck Round Bottles

Ideal for Liquid Transport –
Environmental Field Testing
and General Purpose



Bottle **Low-Density Polyethylene (LDPE)**
Cap **Polypropylene (PP)**

These bottles are produced from heavy gauge polyethylene, and are durable and ideal for transportation of water and oil samples back to the laboratory for analysis. Samples can be secured using shoulder and cap tags to avoid sample contamination during transport. Molded graduations can be used for rough measurements.

- Molded graduation
- Easy-grip cap
- Molded-in holes in the cap and body accommodate wire security seals and identification tags
- Packed in lot-coded cardboard cartons suitable for the food industry*

Ordering Information / Specifications

Capacity	Item #	Qty/Box	Height (mm)	Bottle O.D. (mm)	Mouth I.D. (mm)	Graduation (mL)	DIN #**
50 mL (1.7 oz)	601595	100	92	38	13	10	GL18
100 mL (3.4 oz)	601597	100	108	48	13	20	GL18
250 mL (8.5 oz)	601599	50	150	60	19	25	GL25
500 mL (16.9 oz)	601601	25	182	75	19	100	GL25
1000 mL (33.8 oz)	601603	20	224	95	23	100	GL32

Note: Bottles can be sterilized by gamma irradiation, ethylene oxide (EtO), microwaves and chemical disinfectant. Not autoclavable.

Tolerated temperature range in normal use: -10°C to +120°C.

140°C temperature limits can be tolerated for short intervals only.

**Leak-tight caps and bottle necks conform to DIN 13316 and 168 guidelines.

*Bottles conform to EC/94/62 and US regulation CONEG for heavy metals content in raw materials used in product of the bottles to contain less than 1 ppm. Bottles are manufactured without the use of mineral lubricant agents. Bottles conform to EC/93/8 guidelines for testing migration of raw materials constituents in plastic devices and EC/93/9 directives for materials and objects dedicated to food packaging and transportation. End users are responsible for validation of compliance for specific containers used in conjunction with their particular packaging application.

Integrated Wash Bottles

Easy-squeeze wash bottles with integrated dispensing tube



Bottle	Low-Density Polyethylene (LDPE)
Cap	Polypropylene (PP)

Easy-squeeze wash bottles feature a molded dispensing tube, a tube-tip cap and a screw-top closure which is ideal for use in every lab. A gentle squeeze releases an accurately direct stream of liquid without the need to tilt the bottle. The wide construction base provides stability for filling. The one-piece, deep threaded screw cap has a molded seal ring and fits tightly against the inner edge of the bottle neck

ensuring a leak-resistance closure. The cap has tagging points for wire closure to the bottle neck.

- Easy grip, stable shape
- Integral molded dispensing tube
- Dispensing tip with closure cap
- Leak-tight caps and bottle necks conform to DIN 13316 and 168 guidelines

Ordering Information / Specifications

Capacity	Item #	Qty/Box	Height (mm)	DIN #**
250 mL (8.5 oz)	601633	10	140	GL32
500 mL (16.9 oz)	601634	10	178	GL32

Note: Bottles can be sterilized by gamma irradiation, ethylene oxide (EtO), microwaves and chemical disinfectant. Not autoclavable.

Tolerated temperature range in normal use: -50°C to +75°C.

90°C temperature limits can be tolerated for short intervals only.

**Leak-tight caps and bottle necks conform to DIN 13316 and 168 guidelines.

Physical Properties of Plastics

Resin	Max use Temp (°C/°F)	Brittleness Temp (°C/°F)	Transparency	Flexibility	Sterilization					Specific Gravity (g/mL)	Permeability (approx. cc-mm/m ² -24hr-Br)		
					Autoclave	Gas	Dry Heat	Radiation	Disinfectants		N ₂	O ₂	CO ₂
HDPE	120/248	-100/-148	Translucent	Rigid	No	Yes	No	Yes	Yes	0.95	651	2868	8990
LDPE	80/176	-100/-148	Translucent	Excel	No	Yes	No	Yes	Yes	0.92	2790	7750	41.850
PMP	175/347	20/68	Transparent	Rigid	Yes	Yes	Yes*	No	Yes	0.83	17.050	69.750	—
PP	135/275	0/32	Translucent	Rigid	Yes	Yes	No	No	Yes	0.90	744	3720	12.400
PS	90/194	20/68	Transparent	Rigid	No	Yes	No	Yes	Some	1.05	853	4650	10.850

HDPE – High-Density Polyethylene

LDPE – Low-Density Polyethylene

PMP – Polymethylpentene

PP – Polypropylene

PS – Polystyrene

*Sterilizing reduces mechanical stress.

CAESA-LAB INC.

Tel: (450) 441-5408

www.caesalabinc.com