

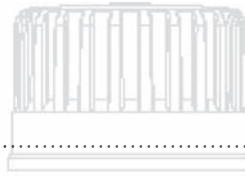
WHEATON®

PETG / PC Bottles & Shake Flasks

Customizable Packaging Solutions



www.wheaton.com



WHEATON Resins, the Best for Your Product

PETG

Eastar™ Copolyester PETG by Eastman Tritan™

Eastar is the "Resin of Choice" for single use containers and medical devices. Thus, we chose PETG from Eastman Tritan for the production of our media bottles. Our PETG products retain their clarity after gamma sterilization, maintain integrity of the contents and are guaranteed to exceed customer's requirements and expectations.

WHEATON PETG Resin meets ISO 10993 and / or USP Class VI biocompatibility requirements and is Food Contact Status Compliant. The PETG is an amorphous material that displays performance properties including clarity and toughness as well as excellent gas barrier and chemical inertness. The products can be safely sterilized with gamma irradiation without property loss or color shift.

Polycarbonate (PC)

Lexan® Polycarbonate by Sabic

Lexan Polycarbonate resin is an amorphous engineering thermoplastic, characterized by outstanding mechanical, optical, electrical and thermal properties. The Lexan resins utilized by WHEATON environmentally confirm to flame retardant standards, are scratch resistance, with a toughness and heat resistance that ensures biocompatible and optical quality. WHEATON products made with the Lexan polycarbonate resin are compliant with stringent FDA and USP requirements. Based on these properties and their inert nature, the media bottles and shaker flasks are ideal packaging vessels. All products are manufactured in a class 10K clean room.

The polycarbonate products are supplied gamma irradiated sterilized (SAL >10⁻⁶) or as aseptically clean and non-sterile. All products (sterile or non-sterile) are packaged and produced in a clean room controlled environment and do not need to be rinsed prior to first use. Consequently, all WHEATON Lexan polycarbonate (PC) containers are a safer alternative to glass. WHEATON polycarbonate bottles and flasks are ideal for steam sterilization of all biologicals, liquids, reagents, media, buffers and aqueous solutions. WHEATON media bottles and flasks withstand repeated autoclaving and are optimal for all microbial culture media production and the preparation of terminally sterile fluids.

All WHEATON PETG and Polycarbonate Bottles are available with a standard cap solution (PETG - Tamper Evident; Polycarbonate - Standard) or available with your choice of cap, separately packaged.

Anatomy of a WHEATON Media Bottle

Threads

WHEATON Media Bottles have continuous and straight-shouldered semi-buttress threads designed to perfectly interlock bottle and cap to securely protect the integrity of liquid within the container.

Graduation Markings

WHEATON Media Bottles have molded-in graduation markings for approximate volumetric measurement reference. Screen printed graduations are available on selected products.

Ergonomic Uniformity

WHEATON Media Bottles are molded with a uniform wall thickness offering a beveled edge ergonomic design that offers durability, strength and improved handling ability. The soft corners of the bottle make it comfortable to hold and occupy a minimum amount of shelf space.



Secure Closure System

WHEATON Media Bottles have a leak resistant, liner-free cap composed of virgin polypropylene (PP), animal component-free resin. The molded in angular seal ring within the cap allows the formation of a leak resistant contact with the bottle neck.

Stable Base

WHEATON Media Bottles are designed to have uniform resin and weight distribution, which is the key to maintaining a bottle stable during filling processes. The symmetrical base ensures steadiness in filling operations. Each bottle is marked with a resin identification code for user reference.

WHEATON Square Media Bottles are available molded of PETG or PC and available either certified sterile and non-pyrogenic or aseptically clean, non-sterile to eliminate the need for washing, depyrogenation and autoclaving. Available in sizes from 30 to 2000mL, the bottles are ideally suited for the preparation and containment of buffers and pH sensitive liquids, including active pharmaceutical ingredients and bulk intermediates.

Shake Flasks, Caps & Clamps



Anatomy of a WHEATON Shake Flask



Erlenmeyer Shake Flasks

WHEATON Erlenmeyer Flasks manufactured with virgin, optically clear, non-leaching LEXAN resin that retains clarity after gamma irradiation. The flasks are certified pyrogen-, DNase- and RNase-free and are packaged particulate free and wrapped in an easy tear, sterile bag. WHEATON Flasks are ideal for all suspension cell cultures, including baculovirus, microbial and algae cultures, as well as media preparation, storage and all related applications. WHEATON Flasks fit all standard shaking incubator systems and can be placed on any platform. In addition, WHEATON offers Shaker Flask Clamps for use with our flasks.

Sterile Erlenmeyer Flasks / Plain Base

Cat. No.	W017779	W017777	W017775	W017773	W017771
Size / Volume	2000mL	1000mL	500mL	250mL	125mL
Units / Pack	24	24	48	72	144
Closure Size	53B	53B	38-430	38-430	38-430

*Baffled Base Erlenmeyer Flasks also available, please contact your WHEATON Representative for additional information.

Vented DuoCap®

WHEATON Erlenmeyer Flasks arrive standard with a patented vented DuoCap. The DuoCap allows both aerobic and anaerobic culture of microbes and algae without needing to replace the cap. Made of medical grade polypropylene, the PTFE 0.22µm membrane allows for sterile gas exchange.

Port Cap Kit

The WHEATON Port Cap Kit offers multiple ports to satisfy the needs of our customers. The WHEATON Port Cap Kit is fully autoclavable and contains either four or three ports that can be used simultaneously or separately. Port covers included.

Filter Adapter Cap

WHEATON has designed a polypropylene filter adapter to combine the filtration options of your preferred 38-430 bottleneck filters with our rugged container. This adapter provides a leakproof alternative that increases product utility and media containment. The filter adapter is autoclavable and is easy to store, use and reuse.



Caps / Accessories

Cat. No.	Port Cap Kit		Filter Adapter	Vented DuoCap®	
	W017840	W017841	W017842	W017832	W017833
Closure Size	53B	38-430	38-430	53B	38-430
Units / Case	1	1	144	192	288



Shaker Clamps

WHEATON Polypropylene Shaker Flasks Clamps are carefully engineered to provide both clipping elasticity and motion resistance in one product. WHEATON Shaker Clamps feature a non-scratch design and are offered in a standard blue color, accompanied by stainless steel screws and washers. The Clamps fit all industry standard shaking incubators and are autoclavable for reuse.

Shaker Clamps

Cat. No.	W017787	W017788	W017789	W017790	W017791
Size	2000mL	1000mL	500mL	250mL	125mL
Height (mm)	89.57	74.5	63.14	57.63	51.17
Diameter (mm)	169.1	143.9	111.6	90.4	74.72

PETG / PC Bottles

Customizable Packaging Solutions

PETG

WHEATON PETG Resin meets ISO 10993 and / or USP Class VI biocompatibility requirements and is Food Contact Status Compliant. The PETG is an amorphous material that displays performance properties including clarity, toughness, excellent gas barrier and chemical inertness. The products can be safely sterilized with gamma radiation without property loss or color shift. WHEATON PETG Square / Octagonal Media Bottles are ideal for the storage of media, laboratory reagents and biological buffers. Graduation markings are molded in for reference filling. WHEATON PETG Square / Octagonal Bottles are provided gamma irradiated sterilized to SAL 10^{-6} with blue caps attached. Each case is clean room packaged for sterile production with multi-barrier elastomer packaging. Available with standard cap or patented tamper-evident closure system.

PC

WHEATON PC Square / Octagonal Media Bottles and Boston Round Bottles are ideal for the storage of media, laboratory reagents and biological buffers. Manufactured in a Class 10K clean room in a ISO 9001 compliant facility with medical grade, virgin polycarbonate resin, these bottles are durable, chemically inert, non-leaching and optically superior. The WHEATON PC Media Bottles withstand repeated autoclaving and are optimal for all microbial culture media production and preparation of terminally sterile fluids. Bottles are provided aseptically clean, non-sterile with standard blue autoclavable caps attached in a multi-barrier elastomer packaging. Available with standard cap.



Media Bottles

PETG Tamper Evident Cap	W017806	W017807	W017808	W017809	W017810	W017811	W017812
PETG Standard Cap	W017813	W017814	W017815	W017816	W017817	W017818	W017819
Polycarbonate	W017795	W017796	W017797	W017798	W017799	W017800	W017801
Size / Volume	2000mL	1000mL	500mL	250mL	125mL	60mL	30mL
Closure Size	53B	38-430	38-430	38-430	38-430	24-415	20-415
Units / Tray	24	48	72	96	144	192	288

Boston Round Bottles

Polycarbonate	W017792	W017793	W017794
Size / Volume	1000mL	500mL	300mL
Closure Size	53B	38-430	38-430
Units / Tray	48	72	96



Diagnostic Bottles

PETG

Sterile WHEATON Diagnostic Bottles are ideal for the safe storage, transfer and transport of diagnostic specimens, antibodies, proteins, nucleic acids, enzymes and substrates. WHEATON Diagnostic Bottles are suitable for air shipment and are tested during each manufacturing run to ensure leak proof performance. All WHEATON Diagnostic Bottles are non-cytotoxic and non-pyrogenic and meet with current biological and pharmaceutical regulatory standards, including USP Class VI, USP 661, and European Pharmacopeia for Abnormal Toxicity. WHEATON Diagnostic Bottles are manufactured from Animal Derived Component Free (ADCF) materials. WHEATON PETG Diagnostic Bottles are packaged with a blue tamper-evident polyethylene closure and are provided sterile to SAL 10^{-6} in a multi-barrier clean room production package with caps attached.

PC

WHEATON PC Diagnostic Bottles are ideal for the sampling, storage, production and packaging of steam sterilized biologicals. They are ideal for leak resistant shipment of reagents and buffer solutions. Provided non-sterile with caps separately packed, WHEATON PC Diagnostic Bottles are shatterproof.



Diagnostic Bottles

PETG	W017822	W017823
Polycarbonate	W017820	W017821
Size / Volume	10mL	5mL
Closure Size	20-415	20-415
Units / Tray	1600	1600



Wide Mouth Bottles

WHEATON Wide Mouth Bottles, made of polycarbonate, are engineered for both ultra-centrifugation and the culture of microbes, plants, algae and other organisms requiring large surface area to volume ratios. For ultra centrifugation processes, the bottles are designed to withstand maximum speeds without leakage and are ideal for all GS3 rotors. For use when relatively small amounts of solids involved, the tight-fitting polypropylene screw cap reduces the possibility of aerosol escape. Both bottles and caps are re-usable and re-sterilizable via autoclaving. The bottles are provided non-sterile with cap attached.

Wide Mouth / Centrifuge Flasks	W017802	W017803	W017804	W017805
Size / Volume	1000mL	500mL	400mL	180mL
Closure Size (mm)	63	63	63	54
Units / Tray	48	72	72	144

Closure Systems

WHEATON Closures... The Perfect Match for PETG and PC Containers

WHEATON closures are made with medical grade, FDA approved polypropylene and high density polyethylene. All closures are autoclavable, reusable and recyclable. All caps are linerless with an integrally-molded seal ring to ensure a leak proof performance. WHEATON closures are manufactured in a Class 10K clean room environment and are supplied non-sterile as well as gamma radiation sterilized. The standard WHEATON cap color is blue.

Standard Cap

The WHEATON Standard Cap works with WHEATON PC Square and Round Media Bottles, PETG Square Media Bottles, PC and PETG Vials and PC Culture Tubes. WHEATON Standard Caps are autoclavable and can be repeatedly steam sterilized.

Tamper Evident Cap

The WHEATON Tamper Evident Cap is available for all WHEATON PETG and PC media bottles. The Tamper-evidence ensures and serves as proof of content containment and is ideal for use with consumables.

Vented DuoCap®

The WHEATON Vented DuoCap accompanies both flat and baffled flasks of all sizes and also available for media bottles. Made of medical grade polypropylene with a PTFE 0.22µm membrane. Ideal for aerobic/anaerobic cell culture.

Septum Cap

The WHEATON Septum Cap can be used with both flasks and media bottles. The WHEATON Septum Cap is available in the WHEATON standard blue medical grade polypropylene with gray butyl rubber. This cap is ideal for injectables and inoculation of pathogen cultures.

Septum DuoCap®

The WHEATON Septum DuoCap offers a combination of the WHEATON Septum cap and the vented DuoCap. This cap provides an additional layer of protection to the standard septum caps.

Tamper Evident Septum Cap

Tamper Evident Septum Cap is identical to the Septum Cap with the addition of a tamper evident ring. It is available in the WHEATON standard blue medical grade polypropylene with gray butyl rubber.

Port Cap Kit

The WHEATON Port Cap Kit offers multiple ports to satisfy the needs of our customers. The WHEATON Port Cap Kit is fully autoclavable and contains either three or four ports that can be used simultaneously or separately. Port covers included.

Caps



Cat. No.	Standard				Tamper Evident			
	W017824	W017825	W017826	W017827	W017828	W017829	W017830	W017831
Closure Size	53B	38-430	24-415	20-415	53B	38-430	24-415	20-415
Units / Case	192	384	384	384	192	288	384	384

Caps



Cat. No.	Septum		Septum DuoCap®		Tamper Evident Septum		Vented DuoCap®		Port Cap Kit	
	W017834	W017835	W017836	W017837	W017838	W017839	W017832	W017833	W017840	W017841
Closure Size	53B	38-430	53B	38-430	53B	38-430	53B	38-430	53B	38-430
Units / Case	192	288	192	288	192	288	192	288	1	1

Sterilizing and Cleaning

WHEATON Polycarbonate Bottles and Flasks

WHEATON Polycarbonate bottles and flasks are manufactured with virgin Lexan® Polycarbonate designed to withstand repeated steam sterilization. The following instructions are provided to assist in the proper cleaning and sterilization of the container.

For Filled Bottles or Flasks

Loosen the cap such that it is barely attached and sterile container according to standard lab protocol for use in a steam autoclave. A small piece of autoclave indicator tape should be used to secure the cap to the vessel and to indicate the vessel has been exposed to steam. Do not use a dry autoclave. Allow the vessels and content to cool to 55°C or lower before securing the cap. Tightening the caps on hot bottles or flasks will lead to a distortion of the bottle as the content cools. The recommended sterilization temperature is 121°C at 15 PSI for up to 60 minutes.

For Empty Containers

Remove the caps from the vessels and sterilize both in autoclave bags. As standard with glassware, cover the necks and tops of the bottles/flasks with aluminum foil. The foil should be crimped tightly to ensure that it does not fall off during autoclaving. A small piece of autoclave indicator tape should be used to secure the foil to the vessel and to indicate the vessel has been exposed to steam.

Caution

The bottles/flasks may "implode" due to rapid exhaust settings (sudden change in temperature and pressure). Therefore, for best results, use a slow exhaust cycle on the sterilizer.

Cleaning

To clean WHEATON polycarbonate bottles and flasks, use warm tap water and a solution of mild soap or household detergent. Rinse with distilled or deionized water and allow to air dry. Product should not be used in a drying oven. Do not over sterilize, as polycarbonate should not be sterilized at temperatures higher than 129°C or in a dry autoclave.

WHEATON Certified Clean PETG Containers Clean You Can Trust

WHEATON PETG Bottles are specifically designed for clean room applications, including pharmaceutical and biotechnology applications. WHEATON PETG Bottles are ideal for the processing and storage of bulk intermediates and critical reagents, including vaccine and therapeutic protein preparations, from 70°C to -40°C. WHEATON PETG Bottles protect against breakage, leakage and radiation contamination while offering a glass-like transparency for ease of sample visibility. Compliant with USP Class VI, European Pharmacopeia for Abnormal Toxicity and USP 661, our PETG bottles are comprised of resins that are free of animal-derived components.

Benefits of WHEATON PETG Bottles:

- Available in a range from 5mL to 2L
- Excellent gas barrier properties, ensuring pH stability
- Sterile, tamper-resistant seal ensures product integrity prior to use
- Suitable for transport and storage
- Square or octagonal footprint for efficient use of storage space
- Leak resistant
- Comprised of resins that are free of animal-derived components
- Recommended temperature range +70°C to -40°C

WHEATON PC Containers & Flasks An Alternative to Glass

WHEATON Polycarbonate Bottles are a safe alternative to glass. Ideal for steam sterilization of all biologicals, liquids, reagents, media, buffers and aqueous solutions. These bottles are durable, chemically inert, non-leaching and optically superior to other bottles on the market.

Benefits of WHEATON PC Bottles:

- Available in a range from 5mL to 2L
- Excellent gas barrier properties, ensuring pH stability
- Autoclavable for repeated usage
- Suitable for transport and storage
- Square or octagonal footprint for efficient use of storage space
- Leak resistant
- Recommended temperature range +40°C to -40°C

WHEATON polycarbonate Erlenmeyer flasks are an ideal replacement for glass flasks. Manufactured with virgin, optically clear, non-leaching polycarbonate in a class 10K clean room, these flask are certified to be free of particulates, DNase, RNase and pyrogens.

Benefits of WHEATON Erlenmeyer Flasks:

- Ideal replacement for glass and other Erlenmeyer / Shaker Flasks
- Patented DuoCAP allows sterile air exchange or leak resistant seal
- Minimize oxidation or pH shifts
- Perform aerobic/anaerobic culture
- Available with septum cap for pathogen containment
- Re-autoclavable, reusable
- Individually packed in easy tear bags
- Sterile to SAL 10⁻⁶
- Available with a flat or baffled base
- Choose baffled base flasks when increased levels of oxygenation and mixing are required

Product Customization

WHEATON provides customers the option of personalizing their container orders by adding a company logo of their choice to the product cap. The selected logo is embedded onto the polypropylene caps and is resistant to autoclaving and scratching. The caps may also be customized to match a PMS color of choice. All caps retain the same properties after customization.*

Solutions

In addition to the customized offerings described above, which allow customers to maximize their brand exposure and ownership of product offerings, we also offer custom design expertise. WHEATON offers our customers the unique opportunity to create new products specific to their needs and desires. Please contact your WHEATON sales representative for additional information.*

*Minimum quantities required.

Packaging

Sterile: Individually Wrapped

WHEATON Erlenmeyer Flasks are individually packaged in easy-tear bags and pre-sterilized through gamma irradiation to ensure maximum sterility and tamper-proof evidence.

Sterile: Double Shrink-Wrap

WHEATON PETG Products are packaged with double-shrink wrap for clean room production. WHEATON PETG Products are available with standard and tamper-evident caps.

Non-Sterile: Shrink-Wrap Trays

WHEATON PC products are packaged in shrink-wrapped trays.

WHEATON®

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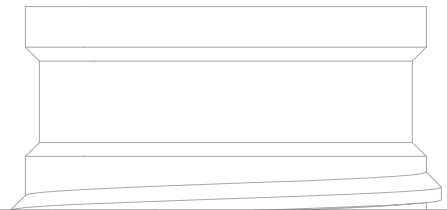
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Shake Flask and PETG / PC Bottle

Product Specifications



WHEATON Cat. No.	Size	Width / Diameter (mm)	Height (mm)	Height with Cap on (mm)	Graduation Markings	Intervals (mL)	Over-head Space	Transparent	Leak Resistant	Particle Free	Pyrogen Free	Non-Cytotoxic/ Non-Hemolytic	Sterile	Temp Range	Autoclavable	Autoclavable Max. Temp	Autoclave Cycles	Closure Size	Cap Type	Cap Material	Neck Diameter (mm)	Individually Wrapped	Available Accessories														
																							1	2	3	4	5	6									
Erlenmeyer Flasks - Flat Base																																					
W017779	2000mL	165	265	276.8	Molded / Yes	—	20%	Yes	Yes	Yes	Yes	Yes	Yes	40°C to -40°C	Yes	130°C	≤ 10	38-430	Patented Vented DuoCAP	Polypropylene	47.50	Yes	W017787	W017824	W017836	W017832	W017840	—									
W017777	1000mL	137	204	215.8	Molded / Yes	—															47.50		W017788	W017824	W017836	W017832	W017840	—									
W017775	500mL	105	156	165.3	Molded / Yes	—															34.50		W017789	W017825	W017837	W017833	W017841	W017842									
W017773	250mL	83	133	142.3	Molded / Yes	—															34.50		W017790	W017825	W017837	W017833	W017841	W017842									
W017771	125mL	71	105	114.3	Molded / Yes	—															34.50		W017791	W017825	W017837	W017833	W017841	W017842									
Culture Tubes - Polycarbonate																																					
W017786	20 x 125mm	20	125	127.1	None	—	0	Yes	Yes	Yes	No	No	No	40°C to -40°C	Yes	130°C	≤ 10	20-415	Standard Cap	Polypropylene	17.5	Yes	—	—	—	—	—	—									
W017785	16 x 125mm	16	125	127.1	None	—															12.6		—	—	—	—	—										
W017783	15 x 103mm	15	103.5	105.6	None	—															12.6		—	—	—	—	—										
W017784	13 x 100mm	13	100	102.1	None	—															12		—	—	—	—	—										
Wide Mouth Centrifuge Bottles - Polycarbonate																																					
W017802	1000mL	91.5	203.5	209.8	100mL - 900mL	100	20%	Yes	Yes	No	No	No	No	40°C to -40°C	Yes	130°C	≤ 18	63mm	—	Polypropylene	57.40	No	—	—	—	—	—	—									
W017803	500mL	80.6	169.5	175.8	100mL - 500mL	50															≤ 19		63mm	57.40	—	—	—										
W017804	400mL	68.6	169.5	175.8	100mL - 400mL	50															≤ 20		63mm	57.40	—	—	—										
W017805	180mL	50.22	104	107.2	Screen Print / Yes	—															≤ 21		54mm	53.50	—	—	—										
Boston Round Media Bottles - Polycarbonate																																					
W017792	1000mL	96.5	215.5	221.2	Screen Print / Yes	—	20%	Yes	Yes	No	No	No	No	40°C to -40°C	Yes	130°C	≤ 10	38-430	Standard Cap	Polypropylene	34.50	No	W017829	W017825	W017837	W017833	W017842	—									
W017793	500mL	81	174.5	180.2	Screen Print / Yes	—															34.50		W017829	W017825	W017837	W017833	W017842	—									
W017794	300mL	71	141	146.7	Screen Print / Yes	—															34.50		W017829	W017825	W017837	W017833	W017842	—									
Square Media Bottles - Polycarbonate																																					
W017795	2000mL	115	266	271.2	100mL - 2000mL	100	20%	Yes	Yes	Yes	No	No	No	40°C to -40°C	Yes	130°C	≤ 10	53B	Standard Cap	Polypropylene	47.5	No	W017828	W017824	W017836	W017832	—	—									
W017796	1000mL	92	213	218.7	50mL - 1000mL	50															34.5		W017829	W017825	W017837	W017833	W017842	—									
W017797	500mL	73	172	177.7	50mL - 500mL	50															34.5		W017829	W017825	W017837	W017833	W017842	—									
W017798	250mL	59	139	144.7	50mL - 250mL	25															34.5		W017829	W017825	W017837	W017833	W017842	—									
W017799	125mL	54.4	103.7	109.5	25mL - 125mL	25															34.5		W017829	W017825	W017837	W017833	W017842	—									
W017800	60mL	40	80	82.1	10mL - 60mL	10															21.5		W017830	—	—	—	—	—									
W017801	30mL	38	60	62.1	10mL - 30mL	10															17.5		W017831	—	—	—	—	—									
Square Media Bottles (PETG) - Tamper Evident Caps																																					
W017806	2000mL	115	266	271.2	100mL - 2000mL	100															20%		Yes	Yes	Yes	Yes	Yes	Yes	70°C to -40°C	No	—	—	53B	Tamper Evident	Polyethylene	47.5	No
W017807	1000mL	92	213	217.7	50mL - 1000mL	50	34.5	W017829	W017825	W017837	W017833	W017839	—																								
W017808	500mL	73.8	172	176.7	50mL - 500mL	50	34.5	W017829	W017825	W017837	W017833	W017839	—																								
W017809	250mL	61	141	145.7	50mL - 250mL	25	34.5	W017829	W017825	W017837	W017833	W017839	—																								
W017810	125mL	54.4	106.7	111.4	25mL - 125mL	25	34.5	W017829	W017825	W017837	W017833	W017839	—																								
W017811	60mL	40	80	83.1	10mL - 60mL	10	21.5	W017830	—	—	—	—	—																								
W017812	30mL	38	60	62.1	10mL - 30mL	10	17.5	W017831	—	—	—	—	—																								
Square Media Bottles (PETG) - Standard Caps																																					
W017813	2000mL	115	266	271.2	100mL - 2000mL	100	20%	Yes	Yes	Yes	Yes	Yes	Yes	70°C to -40°C	No	—	—	53B	Standard Cap	Polypropylene	40	No	W017828	W017824	W017836	W017832	W017838	—									
W017814	1000mL	92	213	217.7	50mL - 1000mL	50															34.5		W017829	W017825	W017837	W017833	W017839	—									
W017815	500mL	73.8	172	176.7	50mL - 500mL	50															34.5		W017829	W017825	W017837	W017833	W017839	—									
W017816	250mL	61	141	145.7	50mL - 250mL	25															34.5		W017829	W017825	W017837	W017833	W017839	—									
W017817	125mL	54.4	106.7	111.4	25mL - 125mL	25															34.5		W017829	W017825	W017837	W017833	W017839	—									
W017818	60mL	40	80	83.1	10mL - 60mL	10															21.5		W017830	—	—	—	—	—									
W017819	30mL	38	60	62.1	10mL - 30mL	10															17.5		W017831	—	—	—	—	—									
Diagnostic Bottles - Polycarbonate																																					
W017820	10mL	23.7	62	64.1	None	—															20%		Yes	Yes	No	No	No	No	40°C to -40°C	Yes	130°C	≤ 10	20-415	Standard Cap	Polypropylene	17.5	Yes
W017821	5mL	23.7	62	64.1	None	—	17.5	W017831	—	—	—	—	—																								
Diagnostic Bottles (PETG)																																					
W017822	10mL	23.7	62	64.1	None	—	20%	Yes	Yes	No	Yes	Yes	Yes	70°C to -40°C	No	—	—	20-415	Tamper Evident	Polyethylene	17.5	No	W017831	—	—	—	—	—									
W017823	5mL	23.5	52	54.1	None	—															17.5		W017831	—	—	—	—	—									

Torque Guide

PETG Square Bottles Family				Polycarbonate Square Bottles Family				Polycarbonate Round Bottles Family				Polycarbonate Diagnostic Bottles Family			
Product #	Cap #	Closure Size	Torque Setting (in / lbs)	Product #	Cap #	Closure Size	Torque Setting (in / lbs)	Product #	Cap #	Closure Size	Torque Setting (in / lbs)	Product #	Cap #	Closure Size	Torque Setting (in / lbs)
W017810	W017829	38-430	21-22	W017799	W017825	38-430	15-16	W017794	W017825	38-430	15-16	W017821	W017827	20-415	3-4
W017809	W017829	38-430	21-22	W017798	W017825	38-430	15-16	W017793	W017825	38-430	15-16	W017820	W017827	20-415	3-4
W017808	W017829	38-430	21-22	W017797	W017825	38-430	15-16	W017792	W017825	38-430	15-16	—	—	—	—
W017807	W017829	38-430	21-22	W017796	W017825	38-430	15-16	—	—	—	—	—	—	—	—
—	—	—	—	W017795	W017825	38-430	15-16	—	—	—	—	—	—	—	—

