FLOWTAINER™
CLOSURE SOLUTIONS

When a single drop of fluid can make the difference in someone's health, you need smart fluid handling solutions that get the job done safely. Manufacturers worldwide rely on connector products that improve yield, cut costs and reduce time to market.

FlowTainer™ closure solutions are ideal for critical fluid handling in upstream and downstream processing, such as transfer, sampling, freezing, thawing, storage, and transport.   Closure assemblies can be uniquely customized to solve your process challenge. FlowTainer™ closure solutions are designed to maintain an aseptic seal and closed sterile system, eliminating the need for cleaning validation and ensuring product integrity.

GL45 Caps and Assemblies for Glass Containers

SPECIFICATIONS:

☑ Manufactured in an ISO 8 Cleanroom

✓ ISO 9001:2015 Certified Facility

♡ USP Class VI and animal component free

⚛ Sterilizable by autoclave and gamma irradiation
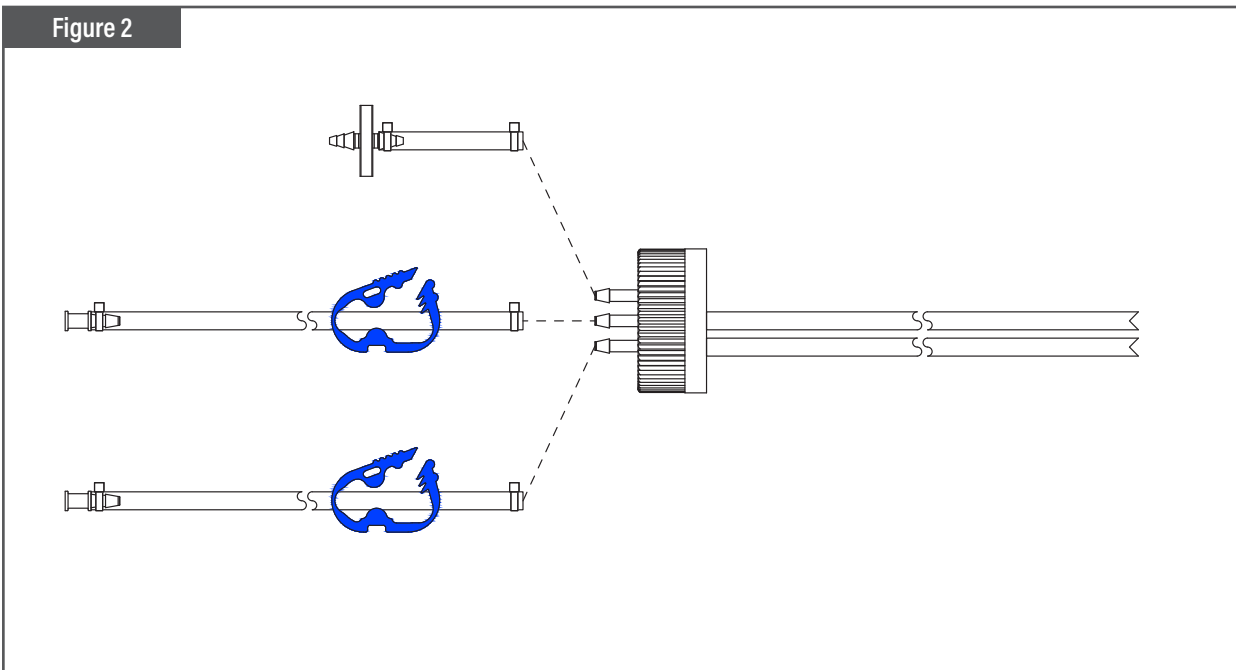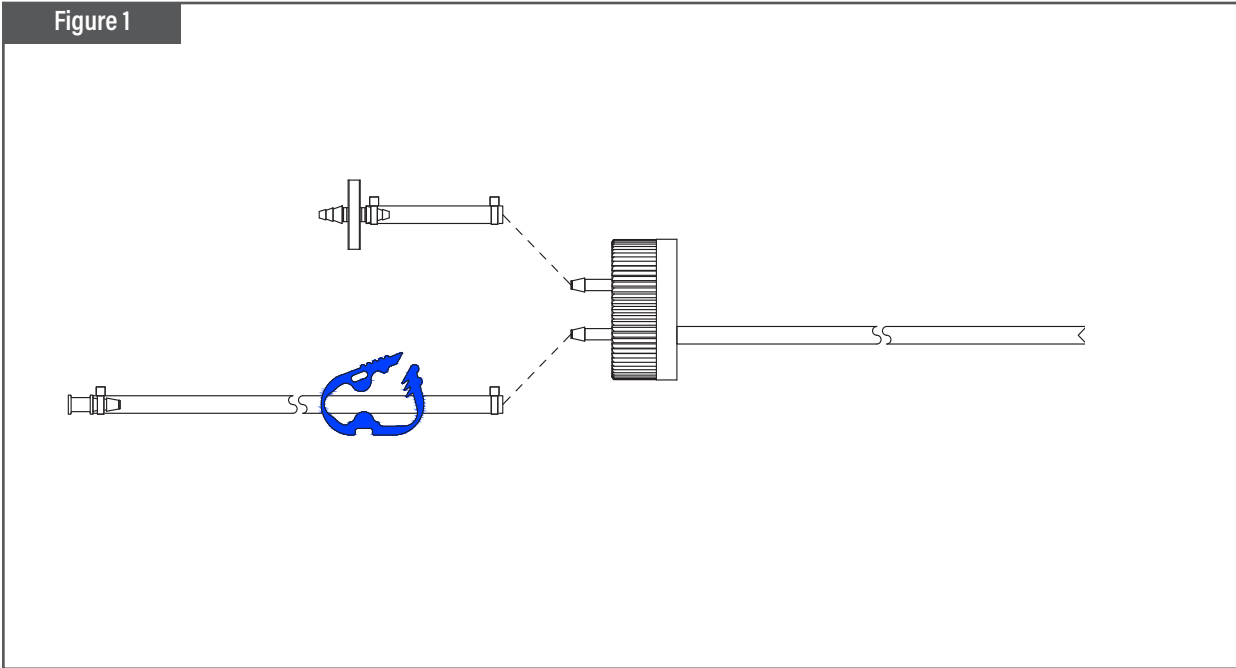
📦 Assemblies come pre-packaged ready for autoclaving

PART NUMBER	DESCRIPTION	CAP MATERIAL	HOSE BARB ID	CLOSURE SIZE	PACK SIZE
F-BCC-45-1	2 port Cap, GL45	PP	(2) - 1/8"	GL45	10
F-BCC-45-2	2 port Cap, GL45	PP	(2) - 1/4"	GL45	10
F-BCC-45-3	3 port Cap, GL45	PP	(3) - 1/8"	GL45	10

PART NUMBER	DESCRIPTION	TUBING	CONFIGURATION		STERILITY CLAIM	FIGURE DETAILS
F-BCCA-45-2-PCS	2 port Cap Assembly, GL45	Platinum Cured Silicone	Line 1: 1/8" x 1/4"; 24" OAL w/ 12" dip tube Line 2: 1/8" x 1/4", 4" OAL	Each	Non-Sterile	Figure 1
F-BCCA-45-2-TPE	2 port Cap Assembly, GL45	AdvantaFlex® TPE		Each	Non-Sterile	Figure 1
F-BCCA-45-2-PM	2 port Cap Assembly, GL45	PharMed®		Each	Non-Sterile	Figure 1
F-BCCA-45-3-PCS	3 port Cap Assembly, GL45	Platinum Cured Silicone	Line 1: 1/8" x 1/4"; 24" OAL w/ 12" dip tube Line 2: 1/8" x 1/4"; 24" OAL w/ 12" dip tube Line 3: 1/8" x 1/4", 4" OAL	Each	Non-Sterile	Figure 2
F-BCCA-45-3-TPE	3 port Cap Assembly, GL45	AdvantaFlex® TPE		Each	Non-Sterile	Figure 2
F-BCCA-45-3-PM	3 port Cap Assembly, GL45	PharMed®		Each	Non-Sterile	Figure 2

PART NUMBER	DESCRIPTION	COMPATIBLE CLOSURE
F-TW-36	F-TW-36 | Torque Wrench set to 36 in-lbs (48mm & GL45)	F-BCC-45-1
		F-BCC-45-2
		F-BCC-45-3
F-TWA-45	F-TWA-45 | Torque Wrench Adapter GL45	F-BCC-45-1
		F-BCC-45-2
		F-BCC-45-3

GL45 Caps and Assemblies for Glass Containers

Figure 1

Figure 2

83B Caps and Assemblies for Carboys (Nalgene® and Foxx LS)

SPECIFICATIONS:

☑ Manufactured in an ISO 8 Cleanroom

✓ ISO 9001:2015 Certified Facility

♡ USP Class VI and animal component free

⚛ Sterilizable by autoclave and gamma irradiation

🛡 Available with sterility assurance level 10^{-6} per ISO 11137

PART NUMBER	DESCRIPTION	CAP MATERIAL	HOSE BARB ID	CLOSURE SIZE	PACK SIZE
F-BCC-83-1	3 port Cap, 83B	PP	(2) - 1/2", (1) - 1/4"	83B	10
F-BCC-83-2	3 port Cap, 83B	PP	(2) - 3/8", (1) - 1/4"	83B	10
F-BCC-83-3	3 port Cap, 83B	PP	(3) - 1/4"	83B	10

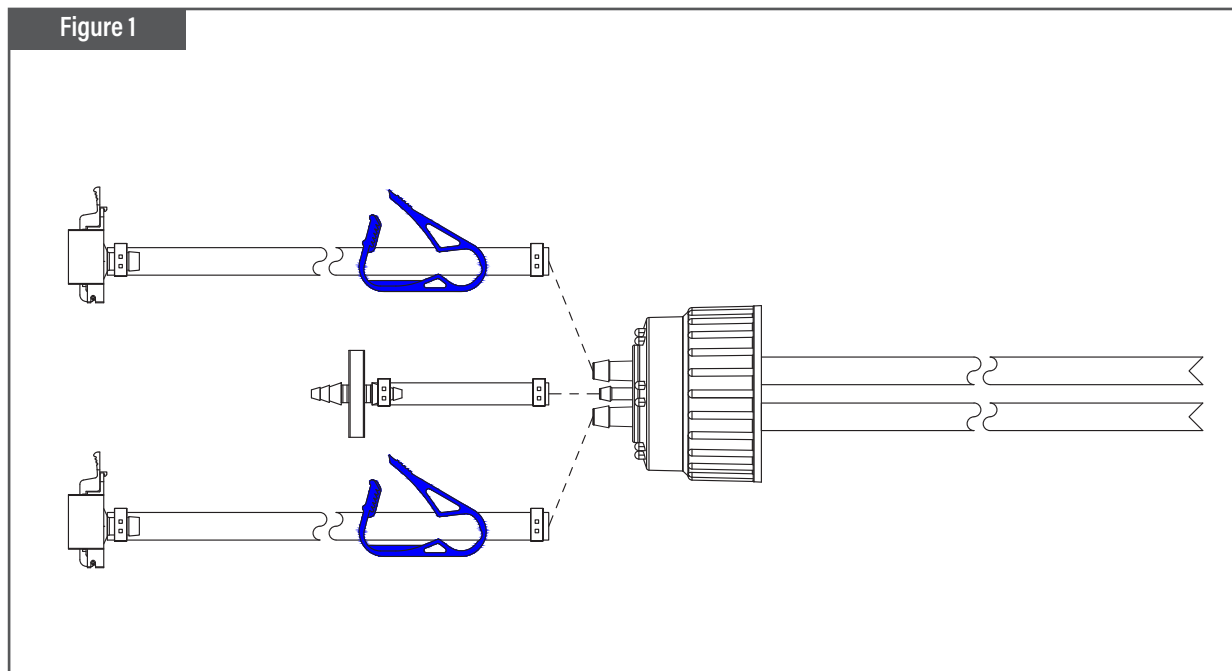| PART NUMBER	DESCRIPTION	TUBING	CONFIGURATION	QUANTITY	STERILITY CLAIM	FIGURE DETAILS
F-BCCA-83-2-PCS	3 port Cap, 83B, for 5L Carboy, PCS	Platinum Cured Silicone	Line 1: 3/8" x 5/8"; 24" OAL w/AseptiQuik® G, 12" dip tube Line 2: 3/8" x 5/8"; 24" OAL w/AseptiQuik® G, 12" dip tube Line 3: 1/4 x 1/2", 4" OAL w/ .2µm vent filter	Each	Sterile	Figure 1
F-BCCA-83-2-TPE	3 port Cap, 83B, for 5L Carboy, TPE	AdvantaFlex® TPE		Each	Sterile	Figure 1
F-BCCA-83-2-PM	3 port Cap, 83B, for 5L Carboy, PharMed®	PharMed®		Each	Sterile	Figure 1
F-BCCA-83-2-PCS	3 port Cap, 83B, for 10L Carboy, PCS	Platinum Cured Silicone	Line 1: 3/8" x 5/8"; 24" OAL w/AseptiQuik® G, 12" dip tube Line 2: 3/8" x 5/8"; 24" OAL w/AseptiQuik® G, 12" dip tube Line 3: 1/4 x 1/2", 4" OAL w/ .2µm vent filter	Each	Sterile	Figure 1
F-BCCA-83-2-TPE	3 port Cap, 83B, for 10L Carboy, TPE	AdvantaFlex® TPE		Each	Sterile	Figure 1
F-BCCA-83-2-PM	3 port Cap, 83B, for 10L Carboy, PharMed®	PharMed®		Each	Sterile	Figure 1
F-BCCA-83-2-PCS	3 port Cap, 83B, for 20L Carboy, PCS	Platinum Cured Silicone	Line 1: 3/8" x 5/8"; 24" OAL w/AseptiQuik® G, 12" dip tube Line 2: 3/8" x 5/8"; 24" OAL w/AseptiQuik® G, 12" dip tube Line 3: 1/4 x 1/2", 4" OAL w/ .2µm vent filter	Each	Sterile	Figure 1
F-BCCA-83-2-TPE	3 port Cap, 83B, for 20L Carboy, TPE	AdvantaFlex® TPE		Each	Sterile	Figure 1
F-BCCA-83-2-PM	3 port Cap, 83B, for 20L Carboy, PharMed®	PharMed®		Each	Sterile	Figure 1

Please see Figure Details on the following page.

83B Caps and Assemblies for Carboys (Nalgene® and Foxx LS)

TORQUE TOOLS:

PART NUMBER	DESCRIPTION	COMPATIBLE CLOSURE
F-TW-73	F-TW-73 | Torque Wrench set to 73 in-lbs (83B)	F-BCC-83-1
		F-BCC-83-2
		F-BCC-83-3
F-TWA-83	F-TWA-83 | Torque Wrench Adapter 83B	F-BCC-83-1
		F-BCC-83-2
		F-BCC-83-3

Figure 1

50mL and 15mL Caps and Assemblies for Centrifuge Tubes (Labcon®)

SPECIFICATIONS:

☑ Manufactured in an ISO 8 Cleanroom

✓ ISO 9001:2015 Certified Facility

♡ USP Class VI and animal component free

❉ Sterilizable by gamma irradiation

⤭ Aseptically connect using TPE tube welder

🛡 Available with sterility assurance level 10-6 per ISO 11137

PART NUMBER	DESCRIPTION	MATERIAL	HOSE BARB ID	CLOSURE SIZE	PACK SIZE
F-CC-50ML	50mL Tube Cap, 2 port	HDPE	(2) - 1/8"	50mL	50
F-CC-15ML	15mL Tube Cap, 2 port	HDPE	(2) - 1/8"	15mL	50
00113096	15 mL PerformR® Centrifuge Tube	PS	N/A	15mL	125
00113097	50 mL SuperClear® Centrifuge Tube	PP	N/A	50mL	50
00114530	15 mL SuperClear® Centrifuge Tube	PP	N/A	15mL	50

PART NUMBER	SAMPLE VOLUME	CONTAINER MATERIAL	CONFIGURATION	QUANTITY/ PACK	STERILITY CLAIM	FIGURE DETAILS
F-CTA-PP-15D	15mL	Polypropylene	Line 1: 1/8" x 1/4"; 12" OAL w/ dip tube Line 2: 1/8" x 1/4", 3" OAL w/ vent filter	5	Non-Sterile	Figure 1
F-CTA-PS-15D	15mL	Polystyrene		5	Non-Sterile	Figure 1
F-CTA-PP-15D-S	15mL	Polypropylene		5	Sterile	Figure 1
F-CTA-PS-15D-S	15mL	Polystyrene		5	Sterile	Figure 1
F-CTA-PP-15	15mL	Polypropylene	Line 1: 1/8" x 1/4"; 12" OAL Line 2: 1/8" x 1/4", 3" OAL w/ vent filter	5	Non-Sterile	Figure 2
F-CTA-PS-15	15mL	Polystyrene		5	Non-Sterile	Figure 2
F-CTA-PP-15-S	15mL	Polypropylene		5	Sterile	Figure 2
F-CTA-PS-15-S	15mL	Polystyrene		5	Sterile	Figure 2
F-CTA-PP-50D	50mL	Polypropylene	Line 1: 1/8" x 1/4"; 12" OAL w/ dip tube Line 2: 1/8" x 1/4", 3" OAL w/ vent filter	5	Non-Sterile	Figure 3
F-CTA-PP-50D-S	50mL	Polypropylene		5	Sterile	Figure 3
F-CTA-PP-50	50mL	Polypropylene	Line 1: 1/8" x 1/4"; 12" OAL Line 2: 1/8" x 1/4", 3" OAL w/ vent filter	5	Non-Sterile	Figure 4
F-CTA-PP-50-S	50mL	Polypropylene		5	Sterile	Figure 4

Please see Figure Details on the following page.

50mL and 15mL Caps and Assemblies for Centrifuge Tubes (Labcon®)
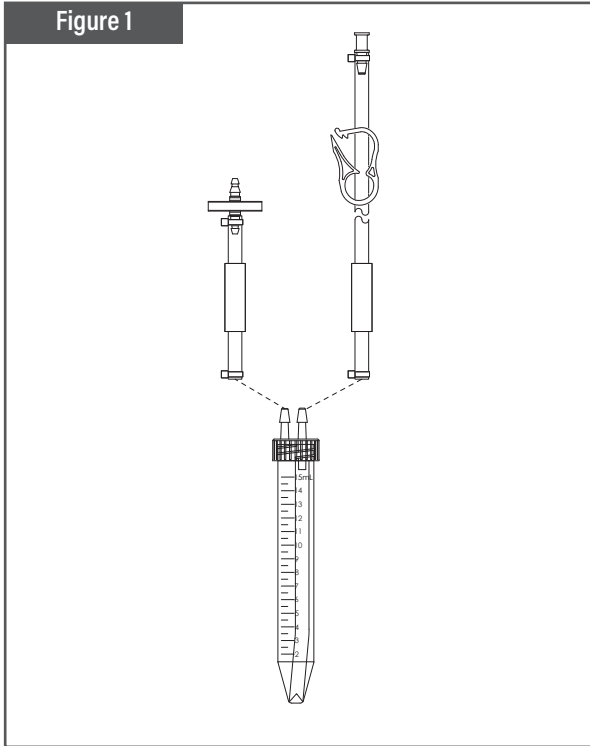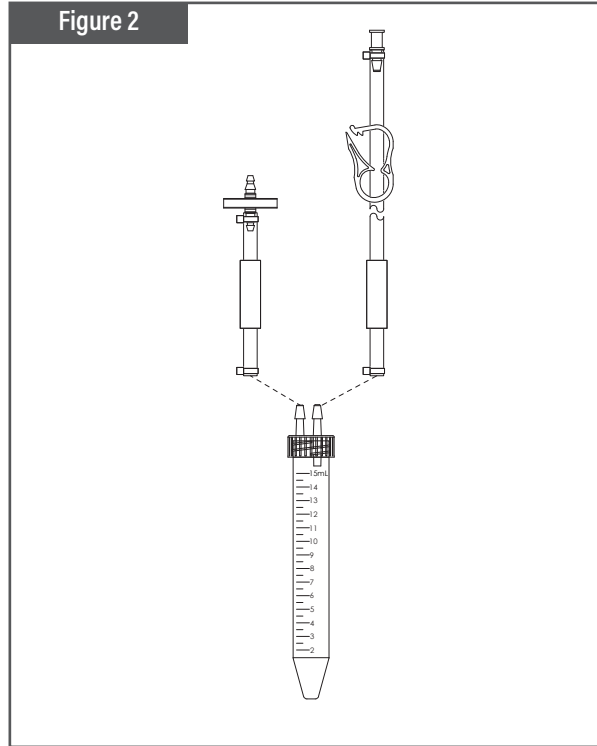

Figure 1
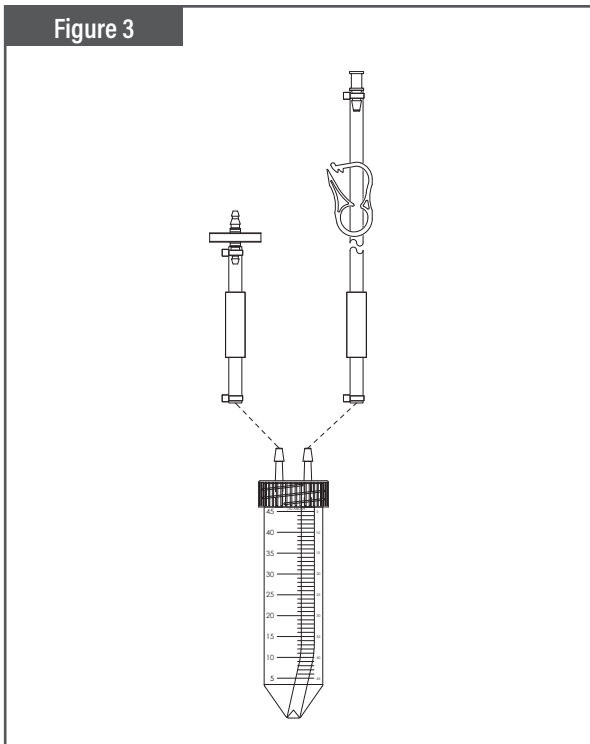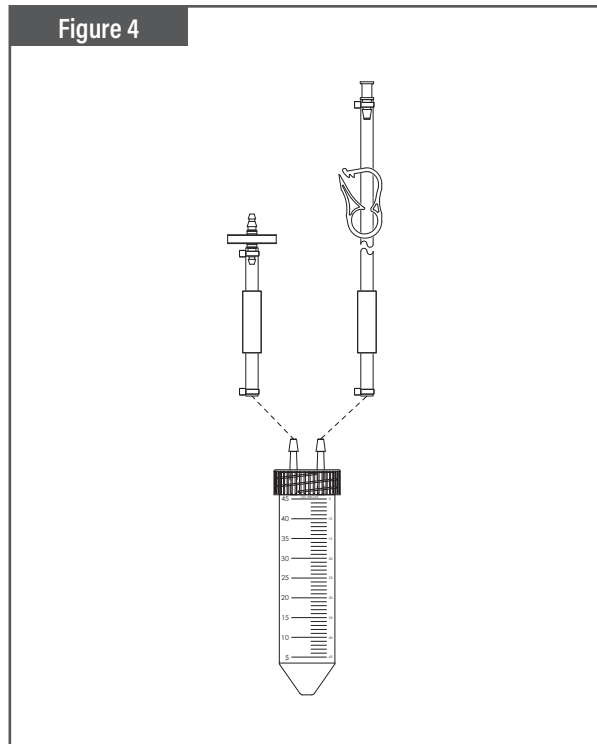

Figure 2

Figure 3

Figure 4

ULTRA CLEAN BOTTLES

DESCRIPTION:

FlowTainer™ ultra clean bottles are the optimal solution for critical fluid handling in upstream and downstream processing, such as filling, freezing, thawing, storage, and transport. The robust impact resistant bottles are made from USP Class VI and animal ingredient free polycarbonate. Manufactured in an ISO 7 cleanroom, ultra clean bottles undergo stringent testing to ensure the highest quality standards are met, such as USP <85> and USP <788>.

FlowTainer™ ultra clean bottles are available from 5 mL to 20 L with a variety of hose barb cap configurations for use with platinum cured silicone and TPE tubing. Choose from standard bottles and assemblies or customize to fit your unique process application.

SPECIFICATIONS:

- ☑ Manufactured in an ISO 7 Cleanroom
- ⊘ ISO 9001:2015 Certified Facility
- ≣ Easy to read graduations
- 🌡 Ultra-low temperature storage and transport to -90°C
- ♡ USP Class VI and animal component free
- ⚛ Sterilizable by gamma irradiation and autoclave
- ❄ Excellent for freezing and storage applications
- ▭ Validation package with extractables available
- 🛡 Available with sterility assurance level 10^{-6} per ISO 11137

ULTRA-LOW TEMPERATURE STORAGE

ULTRA CLEAN BOTTLES

FLOWTAINER™ REGULATORY OVERVIEW:

Material of Construction

Polycarbonate (PC) Bottle and HDPE Cap

Biocompatibility

USP <85>, Bacterial Endotoxin

USP <87>, Biological Reactivity Tests, Cytotoxicity, In Vitro

USP <88>, Biological Reactivity Tests, Class VI, In Vivo

ISO 10993-4, Hemolysis

Physiochemical

USP <661>, Plastic Packaging Systems

FDA 21 CFR 177.1580, Polycarbonate Resins

FDA 21 CFR 177.1520, Olefin Polymers

Particulate

USP <788>, Particulate Matter in Injections

Extractables

Per guidelines of BPOG and USP <665>

Legislation

REACH

RoHS

Shelf Life

3 Years, Non-Sterile/Non-Irradiated

FLOWTAINER™ ULTRA CLEAN BOTTLES

PART NUMBERS:

PART NUMBER	VOLUME	BOTTLE MATERIAL	CAP MATERIAL	CLOSURE SIZE	STERILITY CLAIM	PACK/CASE
F-PCB-005ML	5 mL	PC	HDPE	24 mm	Non-Sterile	25/500
F-PCB-005ML-G	5 mL	PC	HDPE	24 mm	Sterile	25/500
F-PCB-020ML	20 mL	PC	HDPE	24 mm	Non-Sterile	25/500
F-PCB-020ML-G	20 mL	PC	HDPE	24 mm	Sterile	25/500
F-PCB-125ML	125 mL	PC	HDPE	48 mm	Non-Sterile	5/50
F-PCB-125ML-G	125 mL	PC	HDPE	48 mm	Sterile	5/50
F-PCB-500ML	500 mL	PC	HDPE	48 mm	Non-Sterile	2/48
F-PCB-500ML-G	500 mL	PC	HDPE	48 mm	Sterile	2/48
F-PCB-001L	1 L	PC	HDPE	48 mm	Non-Sterile	2/28
F-PCB-001L-G	1 L	PC	HDPE	48 mm	Sterile	2/28
F-PCB-002L	2 L	PC	HDPE	48 mm	Non-Sterile	1/20
F-PCB-002L-G	2 L	PC	HDPE	48 mm	Sterile	1/20
F-PCB-005L	5 L	PC	HDPE	70 mm	Non-Sterile	1/6
F-PCB-005L-G	5 L	PC	HDPE	70 mm	Sterile	1/6
F-PCB-010L	10 L	PC	HDPE	70 mm	Non-Sterile	1/3
F-PCB-010L-G	10 L	PC	HDPE	70 mm	Sterile	1/3
F-PCB-020L	20 L	PC	HDPE	70 mm	Non-Sterile	1/3
F-PCB-020L-G	20 L	PC	HDPE	70 mm	Sterile	1/3

CLOSURES FOR FLOWTAINER™ ULTRA CLEAN BOTTLES

PART NUMBER	DESCRIPTION	CAP MATERIAL	HOSE BARB ID	CLOSURE SIZE	STERILTY CLAIM
F-BCC-48-1	2 Port Cap, 48 mm	HDPE	(1) - 1/8", (1) - 1/4"	48 mm	Non-Sterile
F-BCC-48-2	2 Port Cap, 48 mm	HDPE	(2) - 1/4"	48 mm	Non-Sterile
F-BCC-48-3	2 Port Cap, 48 mm	HDPE	(2) - 1/8"	48 mm	Non-Sterile
F-BCC-48-4	3 Port Cap, 48 mm	HDPE	(3) - 1/4"	48 mm	Non-Sterile
F-BCC-48-5	3 Port Cap, 48 mm	HDPE	(2) - 1/4", (1) - 1/8"	48 mm	Non-Sterile
F-BCC-70-1	2 Port Cap, 70 mm	HDPE	(2) - 1/4"	70 mm	Non-Sterile
F-BCC-70-2	3 Port Cap, 70 mm	HDPE	(3) - 1/4"	70 mm	Non-Sterile
F-BCC-70-3	4 Port Cap, 70 mm	HDPE	(4) - 3/8"	70 mm	Non-Sterile
F-BCC-70-4	4 Port Cap, 70 mm	HDPE	(4) - 1/4"	70 mm	Non-Sterile

FLOWTAINER™ ULTRA CLEAN BOTTLES

TORQUE TOOLS:

PART NUMBER	DESCRIPTION	COMPATIBLE CLOSURE
F-TW-36	F-TW-36 | Torque Wrench set to 36 in-lbs (48mm & GL45)	F-BCC-48-1
		F-BCC-48-2
		F-BCC-48-3
		F-BCC-48-4
		F-BCC-48-5
F-TW-59	F-TW-59 | Torque Wrench set to 59 in-lbs (70mm)	F-BCC-70-1
		F-BCC-70-2
		F-BCC-70-3
		F-BCC-70-4
F-TWA-48FT	F-TWA-48FT | Torque Wrench Adapter 48mm FlowTainer™	F-BCC-48-1
		F-BCC-48-2
		F-BCC-48-3
		F-BCC-48-4
		F-BCC-48-5
F-TWA-70FT	F-TWA-70FT | Torque Wrench Adapter 70mm FlowTainer™	F-BCC-70-1
		F-BCC-70-2
		F-BCC-70-3
		F-BCC-70-4

MEDIA BOTTLES, ASSEMBLIES AND CAPS

PETG BOTTLE SPECIFICATIONS:

☑ Manufactured in an ISO 7 Cleanroom

✓ ISO 9001:2015 Certified Facility

♡ USP Class VI and Animal Component Free

🌡 Non-Pyrogenic and DNase/RNAse Free

⚛ Sterilizable by Gamma Irradiation

⊕ Available with Sterility Assurance Level 10^{-6} per ISO 11137

PET BOTTLE SPECIFICATIONS:

☑ Manufactured in an ISO 7 Cleanroom

✓ ISO 9001:2015 Certified Facility

♡ USP Class VI and Animal Component Free

🌡 Non-Pyrogenic and DNase/RNAse Free

⚛ Sterilizable by Gamma Irradiation

⊕ Available with Sterility Assurance level 10^{-6} per ISO 11137

PETG/PET BOTTLE REGULATORY OVERVIEW

Material of Construction
PETG or PET

Biocompatibility
USP <85>, Bacterial Endotoxin

USP <87>, Biological Reactivity Tests, Cytotoxicity, In Vitro

USP <88>, Biological Reactivity Tests, Class VI, In Vivo

ISO 10993-4, Hemolysis

ISO 10993-5, Cytoxicity

ISO 10993-6, Implantation

ISO 10993-10, Irritation and Sensitization

ISO 10993-11, Systemic Toxicity

Physiochemical
USP <661>, Plastic Packaging Systems

Particulate
USP <788>, Particulate Matter in Injections

Legislation
REACH

RoHS

Shelf Life
3 Years, Non-Sterile/Non-Irradiated

MEDIA BOTTLES, ASSEMBLIES AND CAPS

MEDIA BOTTLES:

PART NUMBER	VOLUME	BOTTLE MATERIAL	QTY PER PACK/CASE	STERILITY CLAIM
F-PGB-060ML-G	60mL	PETG	24/192	Sterile
F-PGB-060ML			24/192	Non-Sterile
F-PGB-125ML-G	125 mL	PETG	24/96	Sterile
F-PTB-125ML-G		PET		
F-PGB-125ML	125 mL	PETG	24/96	Non-Sterile
F-PTB-125ML		PET		
F-PGB-250ML-G	250 mL	PETG	30/60	Sterile
F-PTB-250ML-G		PET	56/224	
F-PGB-250ML	250 mL	PETG	30/60	Non-Sterile
F-PTB-250ML		PET	56/224	
F-PGB-500ML-G	500 mL	PETG	24/48	Sterile
F-PTB-500ML-G		PET	40/120	
F-PGB-500ML	500 mL	PETG	24/48	Non-Sterile
F-PTB-500ML		PET	40/120	
F-PGB-001L-G	1 L	PETG	12/24	Sterile
F-PTB-001L-G		PET	20/40	
F-PGB-001L	1 L	PETG	12/24	Non-Sterile
F-PTB-001L		PET	20/40	

MEDIA BOTTLE CAPS:

PART NUMBER	DESCRIPTION	CAP MATERIAL	HOSE BARB ID	CLOSURE SIZE	PACK SIZE
F-MBC-2B	2 Port Cap	Polypropylene	(2) - 3/16"	125mL/250mL/500mL/1L Media Bottle	12
F-MBC-3B	3 Port Cap	Polypropylene	(2) - 3/16"	125mL/250mL/500mL/1L Media Bottle	12

MEDIA BOTTLES, ASSEMBLIES AND CAPS

MEDIA BOTTLE ASSEMBLY WITH 2 PORT CAP:

PART NUMBER	VOLUME	BOTTLE MATERIAL	CONFIGURATION	QTY PER PACK/CASE	STERILITY CLAIM	FIGURE DETAILS
F-PGBA-125ML-2	125mL	PETG	Line 1: 1/8" x 1/4" TPE Tubing; 24" OAL w/ MPC; Diptube Line 2: 1/8" x 1/4" , 4" OAL w/ vent filter	1/6	Sterile	Figure 1
F-PTBA-125ML-2		PET				
F-PGBA-250ML-2	250ml	PETG	Line 1: 1/8" x 1/4" TPE Tubing; 24" OAL w/ MPC; Diptube Line 2: 1/8" x 1/4" , 4" OAL w/ vent filter	1/6	Sterile	Figure 2
F-PTBA-250ML-2		PET				
F-PGBA-500ML-2	500mL	PETG	Line 1: 1/8" x 1/4" TPE Tubing; 24" OAL w/ MPC; Diptube Line 2: 1/8" x 1/4" , 4" OAL w/ vent filter	1/6	Sterile	Figure 3
F-PTBA-500ML-2		PET				
F-PGBA-001L-2	1L	PETG	Line 1: 1/8" x 1/4" TPE Tubing; 24" OAL w/ MPC; Diptube Line 2: 1/8" x 1/4" , 4" OAL w/ vent filter	1/6	Sterile	Figure 4
F-PTBA-001L-2		PET				

MEDIA BOTTLE ASSEMBLY WITH 3 PORT CAP:

PART NUMBER	VOLUME	BOTTLE MATERIAL	CONFIGURATION	QTY PER PACK/CASE	STERILITY CLAIM	FIGURE DETAILS
F-PGBA-125ML-3	125mL	PETG	Line 1: 1/8" x 1/4" TPE Tubing; 24" OAL w/ MPC ; Diptube Line 2: 1/8" x 1/4" , 4" OAL w/ vent filter Line 3: 1/8" x 1/4" TPE Tubing; 24" OAL w/ MPC; Diptube	1/6	Sterile	Figure 1
F-PTBA-125ML-3		PET				
F-PGBA-250ML-3	250ml	PETG	Line 1: 1/8" x 1/4" TPE Tubing; 24" OAL w/ MPC ; Diptube Line 2: 1/8" x 1/4" , 4" OAL w/ vent filter Line 3: 1/8" x 1/4" TPE Tubing; 24" OAL w/ MPC; Diptube	1/6	Sterile	Figure 2
F-PTBA-250ML-3		PET				
F-PGBA-500ML-3	500mL	PETG	Line 1: 1/8" x 1/4" TPE Tubing; 24" OAL w/ MPC ; Diptube Line 2: 1/8" x 1/4" , 4" OAL w/ vent filter Line 3: 1/8" x 1/4" TPE Tubing; 24" OAL w/ MPC; Diptube	1/6	Sterile	Figure 3
F-PTBA-500ML-3		PET				
F-PGBA-001L-3	1L	PETG	Line 1: 1/8" x 1/4" TPE Tubing; 24" OAL w/ MPC ; Diptube Line 2: 1/8" x 1/4" , 4" OAL w/ vent filter Line 3: 1/8" x 1/4" TPE Tubing; 24" OAL w/ MPC; Diptube	1/6	Sterile	Figure 4
F-PTBA-001L-3		PET				