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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.

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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



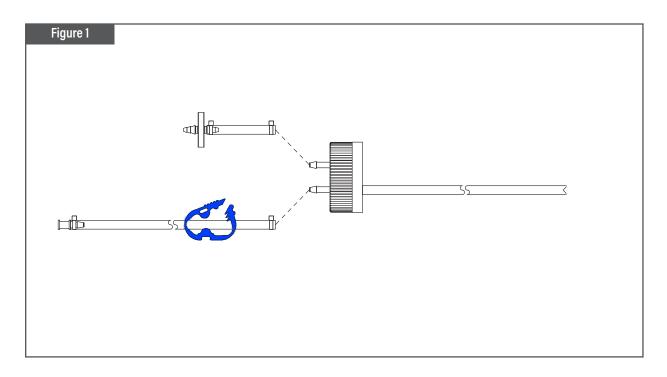
PART NUMBER	DESCRIPTION	CAP MATERIAL	HOSE BARB ID	CLOSURE SIZE	PACK SIZE
F-BCC-45-1	2 port Cap, GL45	PP	(2) - 1/8"	GL45	10
F-BCC-45-2	2 port Cap, GL45	PP	(2) - 1/4"	GL45	10
F-BCC-45-3	3 port Cap, GL45	PP	(3) - 1/8"	GL45	10

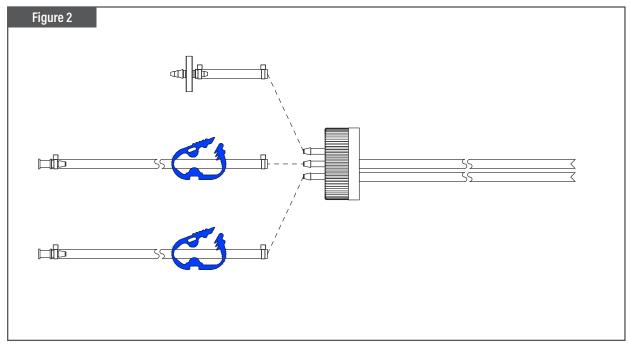
PART NUMBER	DESCRIPTION TUBING		CONFIGURATION	STERILITY CLAIM	FIGURE DETAILS	
F-BCCA-45-2-PCS	2 port Cap Assembly, GL45	Platinum Cured Silicone		Each	Non-Sterile	Figure 1
F-BCCA-45-2-TPE	2 port Cap Assembly, GL45	AdvantaFlex® TPE	Line 1: 1/8" x 1/4"; 24" OAL w/ 12" dip tube Line 2: 1/8" x 1/4", 4" OAL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

Please see Figure Details on the following page.



GL45 Caps and Assemblies for Glass Containers







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



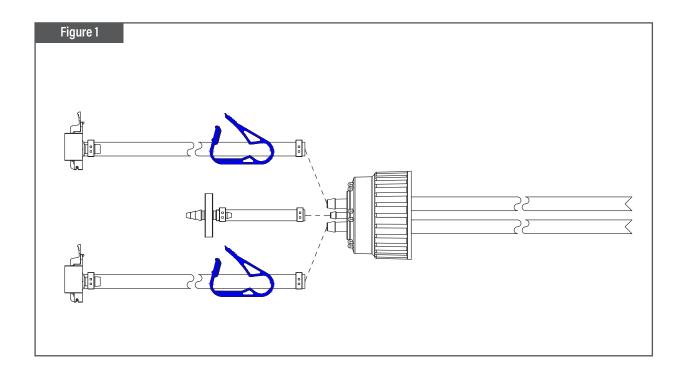
PART NUMBER	DESCRIPTION	CAP MATERIAL	HOSE BARB ID	CLOSURE SIZE	PACK SIZE
F-BCC-83-1	3 port Cap, 83B	PP	(2) - 1/2", (1) - 1/4"	83B	10
F-BCC-83-2	3 port Cap, 83B	PP	(2) - 3/8", (1) - 1/4"	83B	10
F-BCC-83-3	3 port Cap, 83B	PP	(3) - 1/4"	83B	10

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	Each	Sterile	Figure 1
F-BCCA-83-2-TPE	3 port Cap, 83B, for 5L Carboy, TPE	AdvantaFlex® TPE	Line 2: 3/8" x 5/8"; 24" OAL w/AseptiQuik® G, 12" dip tube	Each	Sterile	Figure 1
F-BCCA-83-2-PM	3 port Cap, 83B, for 5L Carboy, PharMed®	PharMed®	Line 3: 1/4 x 1/2", 4" OAL w/ .2µm vent filter	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	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 [®]	Line 3: 1/4 x 1/2", 4" OAL w/ .2µm vent filter	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	Each	Sterile	Figure 1
F-BCCA-83-2-TPE	3 port Cap, 83B, for 20L Carboy, TPE	AdvantaFlex® TPE	w/AseptiQuik® G, 12" dip tube Line 2: 3/8" x 5/8"; 24" OAL w/AseptiQuik® G, 12" dip tube	Each	Sterile	Figure 1
F-BCCA-83-2-PM	3 port Cap, 83B, for 20L Carboy, PharMed®	PharMed°	Line 3: 1/4 x 1/2", 4" OAL w/ .2µm vent filter	Each	Sterile	Figure 1

Please see Figure Details on the following page.



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





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

SPECIFICATIONS:

~	Manufactured	in	an	IS0	8	Cleanroom
~	Manulactureu	111	all	100	U	Cicariioui

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



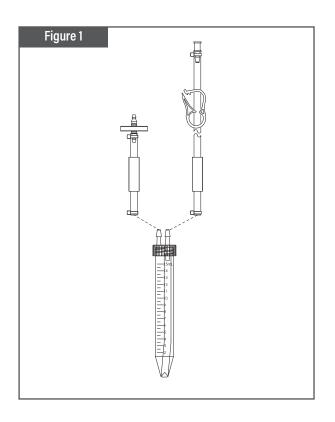
PART NUMBER	DESCRIPTION	MATERIAL	HOSE BARB ID	CLOSURE SIZE	PACK SIZE
F-CC-50ML	50mL Tube Cap, 2 port	HDPE	(2) - 1/8"	50mL	50
F-CC-15ML	15mL Tube Cap, 2 port	HDPE	(2) - 1/8"	15mL	50
00113096	15 mL PerformR° Centrifuge Tube	PS	N/A	15mL	125
00113097	50 mL SuperClear® Centrifuge Tube	PP	N/A	50mL	50
00114530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

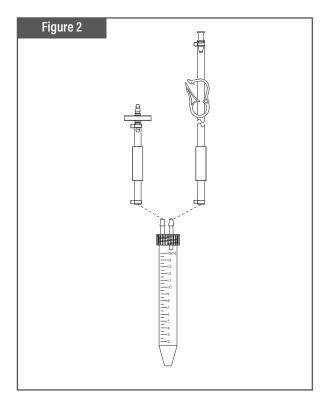
PART NUMBER	SAMPLE VOLUME	CONTAINER MATERIAL	CONFIGURATION	QUANTITY/ Pack	STERILITY Claim	FIGURE Details
F-CTA-PP-15D	15mL	Polypropylene		5	Non-Sterile	Figure 1
F-CTA-PS-15D	15mL	Polystyrene	Line 1: 1/8" x 1/4"; 12" OAL w/ dip tube	5	Non-Sterile	Figure 1
F-CTA-PP-15D-S	15mL	Polypropylene	Line 2: 1/8"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

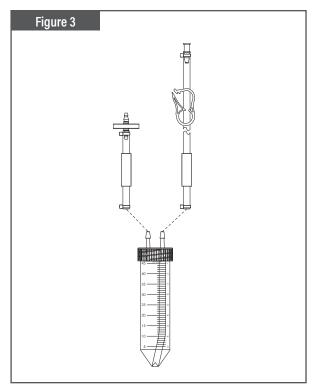
Please see Figure Details on the following page.

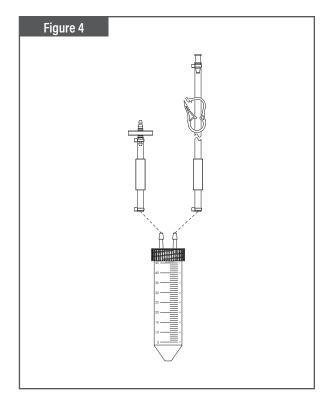


50mL and 15mL Caps and Assemblies for Centrifuge Tubes (Labcon®)









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:



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:

Legislation **REACH** RoHS **Shelf Life**

3 Years, Non-Sterile/Non-Irradiated

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>







ULTRA CLEAN BOTTLES

PART NUMBERS:

PART NUMBER	VOLUME	BOTTLE MATERIAL	CAP MATERIAL	CLOSURE SIZE	STERILITY CLAIM	QTY PER 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 mtm	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 mmt	Non-Sterile	2/48
F-PCB-500ML-G	500 mL	PC	HDPE	48 mm	Sterile	2/48
F-PCB-001L	1L	PC	HDPE	48 mm	Non-Sterile	2/28
F-PCB-001L-G	1L	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



MEDIA BOTTLES, ASSEMBLIES AND CAPS



PETG BOTTLE SPECIFICATIONS:

$\overline{\mathbf{v}}$	Manufactured	lin an	1907	Cleanroom







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			24/192	Sterile	
F-PGB-060ML	60mL	PETG	24/192	Non-Sterile	
F-PGB-125ML-G	125 mL	PETG			
F-PTB-125ML-G		PET	24/96	Sterile	
F-PGB-125ML		PETG			
F-PTB-125ML	125 mL	PET	24/96	Non-Sterile	
F-PGB-250ML-G		PETG	30/60		
F-PTB-250ML-G	250 mL	PET	56/224	Sterile	
F-PGB-250ML		PETG	30/60		
F-PTB-250ML	250 mL	PET	56/224	Non-Sterile	
F-PGB-500ML-G		PETG	24/48		
F-PTB-500ML-G	500 mL	PET	40/120	Sterile	
F-PGB-500ML		PETG	24/48		
F-PTB-500ML	500 mL	PET	40/120	Non-Sterile	
F-PGB-001L-G		PETG	12/24		
F-PTB-001L-G	1L	PET	20/40	Sterile	
F-PGB-001L	41	PETG	12/24	N 0: "	
F-PTB-001L	- 1L	PET	20/40	Non-Sterile	

MEDIA BOTTLE CAPS:

PART NUI	MBER	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			
F-PTBA-250ML-2		PET		1/6	Sterile	Figure 2
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				

