

Nova Bio Bag Single-Use Solution



BIOBGWB Single-Use Cell Culture Bag

Single-use processes are widely used in the biopharmaceutical field. These processes are being accepted and used by more and more biopharmaceutical companies due to their advantages of small fixed investment, reduced production time, low contamination risk, and flexible operation. GVS Single-Use Cell Culture Bag is specially designed for common cell culture applications in biopharmaceutical development.

Applications

Suitable for various cell culture conditions, including scientific research, research and development, in-process seed culture, and new therapies, such as cell therapy. Works with the rocking cell culture systems of GVS or other major suppliers in the market.

Features:

- Easy use: This product is sterile for single use, providing a safe and suitable environment for cell growth, with the features of easy installation and operation
- Good stability: The bags are composed of co-extruded multi-layer films with excellent flexibility and low gas penetration rate, and are suitable for long-term cell culture
- High cell density: The perfusion function enables the high-density cell culture in a faster manner
- Good biosafety: The material liquid contact layer is composed of EVA copolymers, which are biologically inert and can guarantee process safety
- Flexible application conditions: The bags can be used at 10–50 ° C and under operating pressures up to 0.1 bar; the bags are available in various sizes to support culture volumes from 300 mL to 25 L
- Wide selection of bag type: GVS provides cell bags for standard operation, cell therapy, and complex use; optional selections include the basic configuration, for pH & DO, perfusion, and pH & DO & perfusion
- Flexible customization of tubings, connectors, and other units to meet the needs of customers
- Complete validation documents:
 - Sterility test
 - Bacterial endotoxin test
 - Integrity test
 - Extractable test
 - Chemical compatibility test
- The biocompatibility of gamma-irradiated bags meets the following specifications:
 - 1) ISO 10993-4: In vivo hemolysis test (extraction method)
 - 2) USP87: Cytotoxicity test (extraction method)
 - 3) USP <88> Class VI intramuscular implantation test
 - 4) USP88: Acute intracutaneous test
 - 5) USP88: Acute systemic toxicity test

Technical Parameters :

FL140C multilayer co-extruded film, EVA liquid contact layer

Item		Test value (> 25 kGy after sterilization by gamma irradiation)	Reference
Physical properties	Haze	89%	ASTM D1003
	Transmittance	31%	ASTM D1003
	Transmissivity	88%	ASTM D882
	Minimum tolerable temperature	Below -40 °C	ASTM D1790
	Density	0.96 g/cm ³	ASTM D792
Mechanical properties	Tensile strength	17 MPa	ASTM D882
	Elongation at break	800%	ASTM D882
	Elastic modulus	94MPa	ASTM D882
	Puncture resistance	42N	ASTM F1306-21
	Right-angled tearing strength	21N	ASTM D1004-21
	Rubbing resistance (23±2° C, 49% RH, rubbed 270 times)	0 hole	ASTM F392/F392M-2011
	Oxygen permeation after 270 rubs (23±2° C, 0% RH, rubbed 270 times)	3.24 cm ³ /(m ² · day · 1bar)	GB/T1038-2000
Barrier properties	Water vapor transmission rate 1.58g	1.58g/ (m ² ·day) (23 °C ,100%RH)	ASTM F1249
	Oxygen permeability	3.40 cm ³ /(m ² ·day·0.1MPa)	ASTM D3985
	Carbon dioxide permeability	8.25 cm ³ /(m ² ·day·0.1MPa)	ASTM F2476
Pass USP<661> plastic packaging system test			
Comply with USP <788> "Test for Particulate Matter in Injections" , and the result meets the requirements for large-volume (> 100ml) intravenous injection.			
Comply with USP <85> "Test for Bacterial Endotoxin" , and the result is ≤ 0.25 EU/ml, meeting the requirements for hydration products.			
No animal-derived ingredients in the components and during the production process			

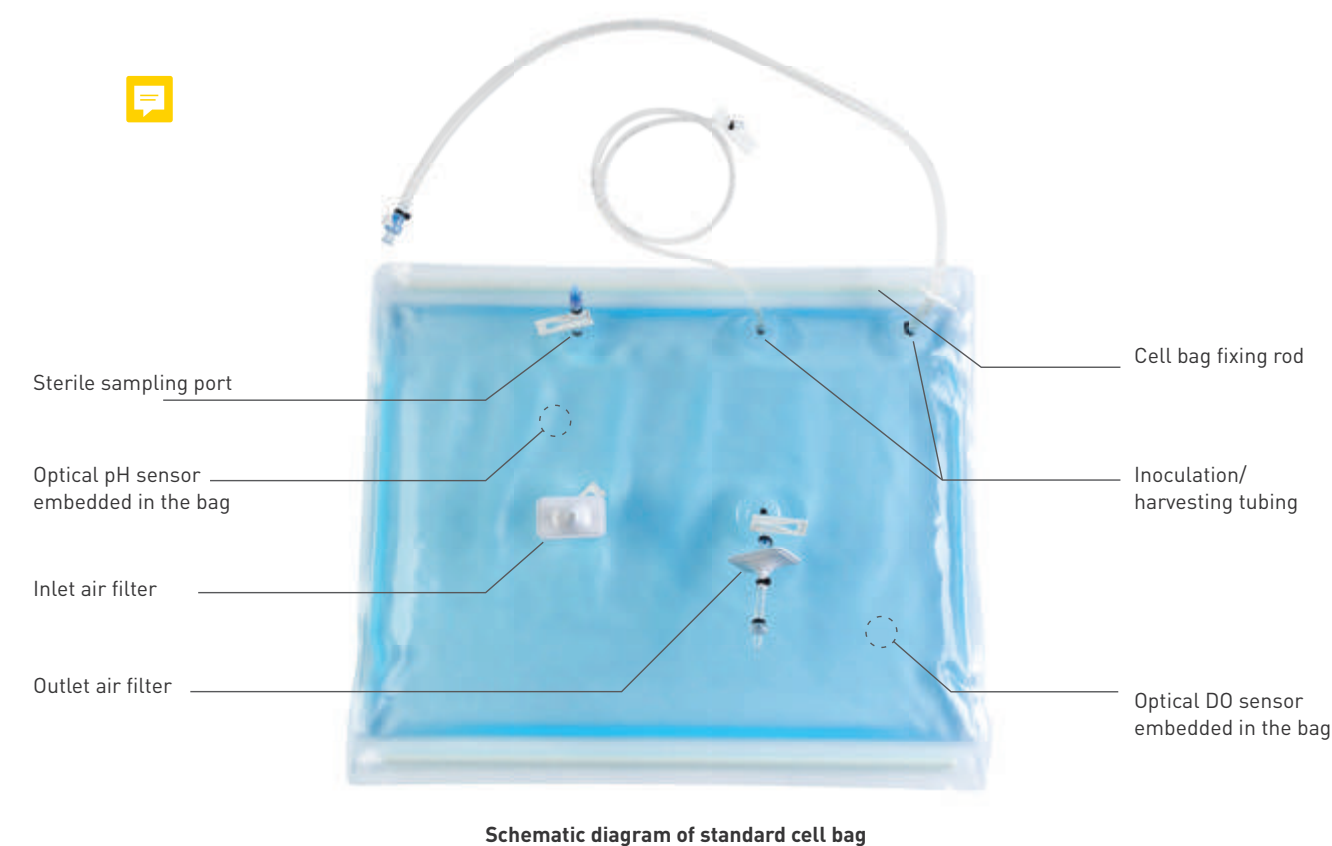
FLCB33 multilayer co-extruded film, LLDPE liquid contact layer

Item		Test value (> 25 kGy after sterilization by gamma irradiation)	Reference
Physical properties	Haze	14.6%	ASTM D1003-21
	Transmittance	91.1%	ASTM D1003-21
	Brittleness temperature by impact	-70 °C / No. of destruction: 0	ASTM D1790-21
	Density	0.928 g/cm ³	ASTM D792-20
Mechanical properties	Tensile strength	Horizontal: 23.8 MPa	ASTM D882-18
		Vertical: 25.8 MPa	
	Elongation at break	Horizontal: 760%	ASTM D882-18
		Vertical: 770%	
	Tensile Modulus	Horizontal: 319 MPa	ASTM D882-18
		Vertical: 295 MPa	
	Puncture resistance	64N	ASTM F1306-21
Barrier properties	Right-angled tearing strength	36N	ASTM D1004-21
	Water vapor transmission rate (23±0.5°C, 100%RH)	0.442 g/(m ² ·day)	ASTM F1249-20
	Oxygen permeability (23°C, 50±5%RH)	1.57 cm ³ /(m ² ·day·bar)	ASTM D1434-82(2015) ^{e1}
	Carbon dioxide permeability (23°C, 50±5%RH)	1.70 cm ³ /(m ² ·day·bar)	ASTM D1434-82(2015) ^{e1}
Pass USP<661> plastic packaging system test			
Comply with USP <788> "Test for Particulate Matter in Injections" , and the result meets the requirements for large-volume (≥ 100ml) intravenous injection.			
Comply with USP <85>"Test for Bacterial Endotoxin" , and the result is ≤ 25 EU/ml, meeting the requirements for hydration products.			
No animal-derived ingredients in the components and during the production process			

FL9101 multilayer co-extruded film, ULDPE liquid contact layer

Item		Test value (> 25 kGy after sterilization by gamma irradiation)	Reference
Physical properties	Haze	7%	ASTM D-1003
	Transmittance	97%	ASTM D-1003
	Transmissivity	93%	ASTM D-1003
	Minimum tolerable temperature	-40 °C	ISO 8570
	Density	0.9 g/cm ³	ASTM D-792
Mechanical properties	Tensile strength	13 Mpa	ASTM D-882
	Elongation at break	300%	ASTM D-882
	Elastic modulus	350 Mpa	ASTM D-882
	Right-angled tearing strength	29N	ASTM D1004-21
Barrier properties	Water vapor transmission rate	0.32 g (m ² ·day)	ASTM F1249
	Oxygen permeability	< 0.05 cm ³ /(m ² ·day·bar)	ASTM D3985
	Carbon dioxide permeability	< 0.2 cm ³ /(m ² ·day·bar)	ASTM F2476
Pass USP <661> plastic packaing system test			
Comply with USP <788> "Test for Particulate Matter in Injections", and the result meets the requirements for large-volume (≥ 100ml) intravenous injection.			
Comply with USP <85> "Test for Bacterial Endotoxin", and the result is ≤ 25 EU/ml, meeting the requirements for hydration products.			
No animal-derived ingredients in the components and during the production process			

A standard BIOBGWB Cell Culture Bag consists of the following units:



- Sterile sampling port: for easy and fast sterile connection to downstream operations;
- Inlet and outlet air filter: allows gases to go in and out of the cell bag;
- pH & DO sensor: pH & DO sensor controlled with PID automation can better maintain a suitable cell growth environment;
- Cell bag fixing rod: secures the cell bag to the tray of the rocking bioreactor;
- Inoculation/harvesting tubing: allows medium and cells to go in and out of the cell bag.

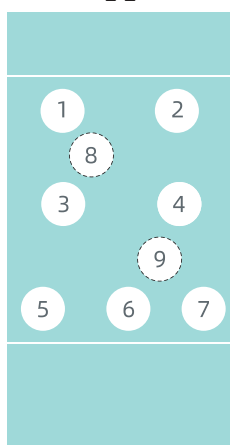
Bag volume	Min. to max. culture volume	Compatible system	Corresponding tray
2 L	300 ml–1 L	WB 50	Tray 10/20
10 L	500 ml–5 L		Tray 10/20
20 L	1 L–10 L		Tray 20
22 L	1 L–10 L		Tray 50
50 L	5 L–25 L		Tray 50
100 L	10 L–50 L		Tray 100/200
200 L	20 L–100 L		Tray 200

Ordering information

For antibodies and proteins

FL140C multilayer co-extruded film, EVA liquid contact layer, soft membrane

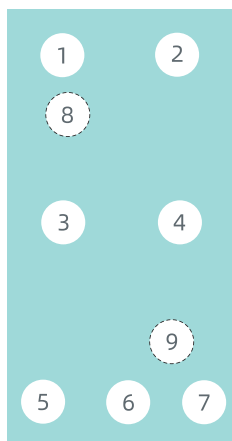
Volume	Version	Product code	Configuration	
2 L	Basic cell bag	BIOBGWBAP 002LC101	1.2	NA
			3.4	Air filter
			5.	C-Flex 1/8 id *1/4 od*100 cm, female Luer
			6.	NA
	pH & DO cell bag	BIOBGWBAP 002LC201	1.	C-Flex 1/4 id *7/16 od*100 cm, plug
			2.	NA
			3.4	Air filter
			5.	Silicone 1/4 id *7/16 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag
	Perfusion cell bag	BIOBGWBAP 002LC304	1.	Y-connector (attached to perfusion filter) C-Flex 1/8 id*1/4 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug
			2.	C-Flex 1/8 id*1/4 od*100 cm, female Luer Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer
			3.4	Air filter
			5.	Silicone 1/4 id*7/16 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag
	pH & DO & Perfusion cell bag	BIOBGWBAP 002LC404	1.	Y-connector (attached to perfusion filter) C-Flex 1/8 id*1/4 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug
			2.	C-Flex 1/8 id*1/4 od*100 cm, female Luer Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer
			3.4	Air filter
			5.	Silicone 1/4 id*7/16 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag



* All connected by non-adjustable straight connectors

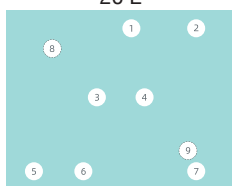
* The minimum culture volume for 2 L pH & DO & perfusion cell bag is 400 mL

Volume	Version	Product code	Configuration			
10 L 1 2 8 3 4 9 5 6 7	Basic cell bag	BIOBGWBAP 010LC101	1.2	NA		
			3.4	Air filter	7.	Silicone 3/16 id*3/8 od*5 cm, needleless sampling
			5.	C-Flex 1/4 id *7/16 od*100 cm, female MPC		
			6.	C-Flex 1/8 id *1/4 od*100 cm, female Luer	8.9	NA
	pH & DO cell bag	BIOBGWBAP 010LC201	1.	NA	6.	Silicone 3/16 id *3/8 od*5 cm, needleless sampling
			2.	C-Flex 1/4 id *7/16 od*100 cm, plug	7.	C-Flex 1/8 id*1/4 od*100 cm, female Luer
			3.4	Air filter		C-Flex 1/8 id*1/4 od*100 cm, female Luer
			5.	Silicone 1/4 id *7/16 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag	8.9	pH, DO sensor
	Perfusion cell bag	BIOBGWBAP 010LC304	1.	Y-connector (attached to perfu-sion filter) C-Flex 1/8 id*1/4 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug	5.	Silicone 1/4 id*7/16 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag
					6.	Silicone 3/16 id*3/8 od*5 cm, needleless sampling
			2.	C-Flex 1/4 id*7/16 od*100 cm, plug	7.	C-Flex 1/8 id*1/4 od*100 cm, female Luer
			3.4	Air filter		Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer NA
pH & DO & Perfusion cell bag	BIOBGWBAP 010LC404			8.9	NA	
		1.	Y-connector (attached to perfu-sion filter) C-Flex 1/8 id*1/4 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug	5.	Silicone 1/4 id*7/16 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag	
		2.	C-Flex 1/4 id*7/16 od*100 cm, plug	6.	Silicone 3/16 id*3/8 od*5 cm, needleless sampling	
		3.4	Air filter	7.	C-Flex 1/8 id*1/4 od*100 cm, female Luer	
					Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer	
				8.9	pH, DO sensor	

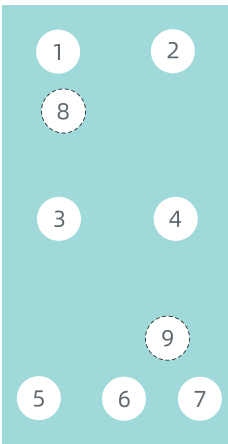


* All connected by non-adjustable straight connectors

Volume	Version	Product code	Configuration	
20 L	Basic cell bag	BIOBGWBAP 020LC101	1.2	NA
			3.4	Air filter
			5.	C-Flex 1/4 id *7/16 od*100 cm, female MPC
	pH & DO cell bag	BIOBGWBAP 020LC201	6.	C-Flex 1/8 id *1/4 od*100 cm, female Luer
			7.	Silicone 3/16 id*3/8 od*5 cm, needleless sampling
			8.9	NA
	Perfusion cell bag	BIOBGWBAP 020LC304	1.	NA
			2.	C-Flex 3/8 id *5/8 od*100 cm, plug
			3.4	Air filter
	pH & DO & Perfusion cell bag	BIOBGWBAP 020LC404	5.	Silicone 3/8 id *5/8 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag
			6.	C-Flex 1/8 id*1/4 od*100 cm, female Luer
			8.9	pH, DO sensor



* All connected by non-adjustable straight connectors

Volume	Version	Product code	Configuration			
22 L 	Basic cell bag	BIOBGWBAP 022LC101	1.2	NA		
			3.4	Air filter		
			5.	C-Flex 1/4 id *7/16 od*100 cm, female MPC	7.	Silicone 3/16 id*3/8 od*5 cm, needleless sampling
			6.	C-Flex 1/8 id *1/4 od*100 cm, female Luer	8.9	NA
	pH & DO cell bag	BIOBGWBAP 022LC201	1.	C-Flex 3/8 id *5/8 od*100 cm, plug	6.	Silicone 3/16 id *3/8 od*5 cm, needleless sampling
			2.	NA	7.	C-Flex 1/8 id*1/4 od*100 cm, female Luer
			3.4	Air filter		
			5.	Silicone 3/8 id *5/8 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag		C-Flex 1/8 id*1/4 od*100 cm, female Luer
					8.9	pH, DO sensor
	Perfusion cell bag	BIOBGWBAP 022LC303	1.	Y-connector (attached to perfu-sion filter) C-Flex 1/8 id*1/4 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug	5.	Silicone 3/8 id*5/8 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag
			2.	C-Flex 3/8 id*5/8 od*100 cm, plug	6.	Silicone 3/16 id*3/8 od*5 cm, needleless sampling
			3.4	Air filter	7.	C-Flex 1/8 id*1/4 od*100 cm, female Luer
					8.9	Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer NA
	pH & DO & Perfusion cell bag	BIOBGWBAP 022LC404	1.	Y-connector (attached to perfu-sion filter) C-Flex 1/8 id*1/4 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug	5.	Silicone 3/8 id*5/8 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag
			2.	C-Flex 3/8 id*5/8 od*100 cm, plug	6.	Silicone 3/16 id*3/8 od*5 cm, needleless sampling
			3.4	Air filter	7.	C-Flex 1/8 id*1/4 od*100 cm, female Luer
					8.9	Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer pH, DO sensor

* All connected by non-adjustable straight connectors

Volume

Version

Product code

Configuration

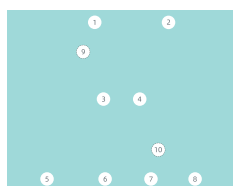
Basic cell bag	BIOBGWBAP	1.2	NA	
	050LC101	3.4	Air filter	7. Silicone 3/16 id*3/8 od*5 cm, needleless sampling
		5.	C-Flex 1/8 id *1/4 od*100 cm, female MPC	8. NA
	BIOBGWBAP	6.	C-Flex 1/4 id *7/16 od*100 cm, female Luer	9.10 NA
	050LS101			

pH & DO cell bag		1.8	C-Flex 3/8 id *5/8 od*100 cm, plug	
	BIOBGWBAP	2.	NA	7. C-Flex 1/8 id*1/4 od*100 cm, female Luer
	050LC201	3.4	Air filter	
		5.	Silicone 3/8 id *5/8 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag	C-Flex 1/8 id*1/4 od*100 cm, female Luer
	BIOBGWBAP	6.	Silicone 3/16 id *3/8 od*5 cm, needleless sampling	9.10 pH, DO sensor
	050LS201			

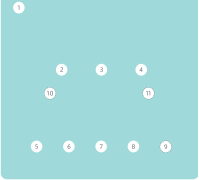
Perfusion cell bag		1.	Y-connector (attached to perfu- sion filter)	
	BIOBGWBAP		C-Flex 1/8 id*1/4 od*6 cm, needleless sampling	6. Silicone 3/16 id*3/8 od*5 cm, needleless sampling
			Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug	7. NA
		2.	C-Flex 3/8 id*5/8 od*100 cm, plug	8. C-Flex 1/8 id*1/4 od*100 cm, female Luer
	BIOBGWBAP	3.4	Air filter	Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer
	050LS304	5.	Silicone 3/8 id*5/8 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag	9.10 NA

pH & DO & Perfusion cell bag		1.	Y-connector (attached to perfu- sion filter)	
	BIOBGWBAP		C-Flex 1/8 id*1/4 od*6 cm, needleless sampling	6. Silicone 3/16 id*3/8 od*5 cm, needleless sampling
			Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug	7. NA
		2.	C-Flex 3/8 id*5/8 od*100 cm, plug	8. C-Flex 1/8 id*1/4 od*100 cm, female Luer
	BIOBGWBAP	3.4	Air filter	Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer
	050LS404	5.	Silicone 3/8 id*5/8 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag	9.10 NA

50 L



* All connected by non-adjustable straight connectors

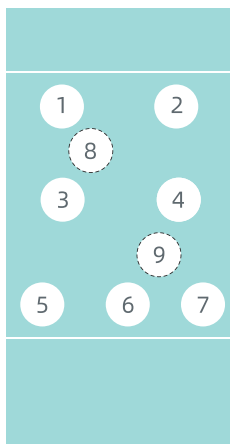
Volume	Version	Product code	Configuration			
100 L 	Basic cell bag	BIOBGWBAP 100LC101	1.	Silicone 3/8 id* 5/8 od* 150 c & C-Flex *50 cm, plug		
			2.3.4	Air filter		
			5.	Silicone 3/8 id* 5/8 od* 150 cm, plug, extended tube inside the bag	7.	Silicone 1/4 id* 7/16 od* 5 cm needless sampling
			6.	Silicone 1/8 id* 1/4 od* 150 cm & C-Flex *50 cm, female Luer and plug	8.	C-Flex 1/4 id* 7/16 od* 200 c plug
	pH & DO cell bag	BIOBGWBAP 100LC201	9.	Silicone 1/8 id* 1/4 od * 150 cm & C-Flex *50 cm, female Luer and plug	10.11	NA
			1.	Silicone 3/8 id* 5/8 od* 150 c & C-Flex *50 cm, plug		
			2.3.4	Air filter		
			5.	Silicone 3/8 id* 5/8 od* 150 cm, plug, extended tube inside the bag	7.	Silicone 1/4 id* 7/16 od* 5 cm needless sampling
	Basic cell bag	BIOBGWBAP 200LC101	6.	Silicone 1/8 id* 1/4 od* 150 cm & C-Flex *50 cm, female Luer and plug	8.	C-Flex 1/4 id* 7/16 od* 200 c plug
			9.	Silicone 1/8 id* 1/4 od * 150 cm & C-Flex *50 cm, female Luer and plug	10.11	NA
			1.	Silicone 3/8 id* 5/8 od* 150 c & C-Flex *50 cm, plug		
			2.3.4	Air filter		
200 L 	pH & DO cell bag	BIOBGWBAP 200LC201	5.	Silicone 3/8 id* 5/8 od* 150 cm, plug, extended tube inside the bag	7.	Silicone 1/4 id* 7/16 od* 5 cm needless sampling
			6.	Silicone 1/8 id* 1/4 od* 150 cm & C-Flex *50 cm, female Luer and plug	8.	C-Flex 1/4 id* 7/16 od* 200 c plug
			9.	Silicone 1/8 id* 1/4 od * 150 cm & C-Flex *50 cm, female Luer and plug	10.11	NA
			1.	Silicone 3/8 id* 5/8 od* 150 c & C-Flex *50 cm, plug		
	Basic cell bag	BIOBGWBAP 200LC101	2.3.4	Air filter		
			5.	Silicone 3/8 id* 5/8 od* 150 cm, plug, extended tube inside the bag	7.	Silicone 1/4 id* 7/16 od* 5 cm needless sampling
			6.	Silicone 1/8 id* 1/4 od* 150 cm & C-Flex *50 cm, female Luer and plug	8.	C-Flex 1/4 id* 7/16 od* 200 c plug
			9.	Silicone 1/8 id* 1/4 od * 150 cm & C-Flex *50 cm, female Luer and plug	10.11	NA
	pH & DO cell bag	BIOBGWBAP 200LC201	1.	Silicone 3/8 id* 5/8 od* 150 c & C-Flex *50 cm, plug		
			2.3.4	Air filter		
			5.	Silicone 3/8 id* 5/8 od* 150 cm, plug, extended tube inside the bag	7.	Silicone 1/4 id* 7/16 od* 5 cm needless sampling
			6.	Silicone 1/8 id* 1/4 od* 150 cm & C-Flex *50 cm, female Luer and plug	8.	C-Flex 1/4 id* 7/16 od* 200 c plug
	Basic cell bag	BIOBGWBAP 200LC101	9.	Silicone 1/8 id* 1/4 od * 150 cm & C-Flex *50 cm, female Luer and plug	10.11	NA
			1.	Silicone 3/8 id* 5/8 od* 150 c & C-Flex *50 cm, plug		
			2.3.4	Air filter		
			5.	Silicone 3/8 id* 5/8 od* 150 cm, plug, extended tube inside the bag	7.	Silicone 1/4 id* 7/16 od* 5 cm needless sampling
	pH & DO cell bag	BIOBGWBAP 200LC201	6.	Silicone 1/8 id* 1/4 od* 150 cm & C-Flex *50 cm, female Luer and plug	8.	C-Flex 1/4 id* 7/16 od* 200 c plug
			9.	Silicone 1/8 id* 1/4 od * 150 cm & C-Flex *50 cm, female Luer and plug	10.11	NA
			1.	Silicone 3/8 id* 5/8 od* 150 c & C-Flex *50 cm, plug		
			2.3.4	Air filter		

Ordering information

For antibodies and proteins

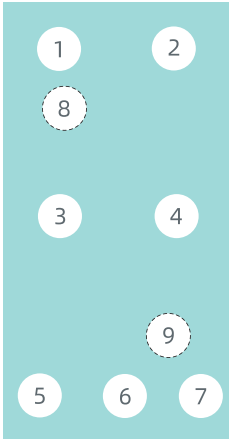
FL140C multilayer co-extruded film, EVA liquid contact layer, soft membrane

Volume	Version	Product code	Configuration	
2 L	Basic cell bag	BIOBGWBAP 002LC102	1.2	NA
			3.4	Air filter
			5.	C-Flex 1/8 id *1/4 od*100 cm, female Luer and plug
			6.	NA
2 L	pH & DO cell bag	BIOBGWBAP 002LC202	1.	C-Flex 1/4 id *7/16 od*100 cm, plug
			2.	NA
			3.4	Air filter
			5.	Silicone 1/4 id *7/16 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag
2 L	Perfusion cell bag	BIOBGWBAP 002LC305	1.	Y -connector (attached to perfusion filter) C-Flex 1/8 id*1/4 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & C-Flex *60cm, plug
			2.	C-Flex 1/8 id*1/4 od*100 cm, female Luer and plug Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer and plug
			3.4	Air filter
			5.	Silicone 1/4 id*7/16 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag
2 L	pH & DO & Perfusion cell bag	BIOBGWBAP 002LC405	1.	Y-connector (attached to perfusion filter) C-Flex 1/8 id*1/4 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug
			2.	C-Flex 1/8 id*1/4 od*100 cm, female Luer and plug Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer and plug
			3.4	Air filter
			5.	Silicone 1/4 id*7/16 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag



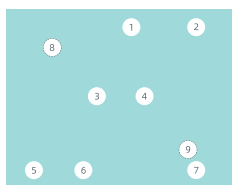
* All connected by non-adjustable straight connectors

* The minimum culture volume for 2 L pH & DO & perfusion cell bag is 400 mL

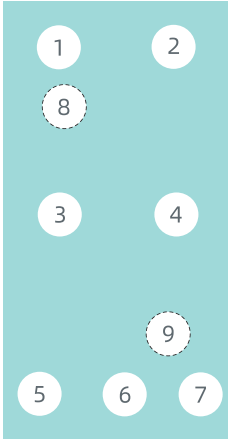
Volume	Version	Product code	Configuration			
10 L	Basic cell bag	BIOBGWBAP 010LC102	1.2	NA		
			3.4	Air filter		
			5.	C-Flex 1/4 id *7/16 od*100 cm female MPC	7.	Silicone 3/16 id *3/8 od *5cm needleless sampling
	pH & DO cell bag	BIOBGWBAP 010LC202	6.	C-Flex 1/8 id *1/4 od*100 cm female Luer and plug	8.9	NA
			1.	NA	6.	Silicone 3/16 id *3/8 od*5 c needleless sampling
	pH & DO cell bag	BIOBGWBAP 010LC202	2.	C-Flex 1/4 id *7/16 od*100 cm plug	7.	C-Flex 1/8 id*1/4 od*100 cm, female Luer and plug
			3.4	Air filter		
	Perfusion cell bag	BIOBGWBAP 010LC305	5.	Silicone 1/4 id *7/16 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag		C-Flex 1/8 id*1/4 od*100 cm, female Luer and plug
					8.9	pH, DO senso
			1.	Y -connector (attached to perfusion filter) C-Flex 1/8 id*1/4 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm &C-Flex *60cm, plug	5.	Silicone 1/4 id*7/16 od*100cm & C-Flex*60 cm, plug, extended tube inside the bag
			2.	C-Flex 1/8 id*1/4 od*100 cm female Luer and plug	6.	Silicone 3/16 id*3/8 od*5 cm needleless sampling
	pH & DO & Perfusion cell bag	BIOBGWBAP 010LC405			7.	C-Flex 1/8 id*1/4 od*100 cm female Luer and plug Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer and plug
			3.4	Air filter	8.9	NA
			1.	Y-connector (attached to perfusion filter) C-Flex 1/8 id*1/4 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug	5.	Silicone 1/4 id*7/16 od*100cm & C-Flex*60 cm, plug, extended tube inside the bag
			2.	C-Flex 1/8 id*1/4 od*100 cm female Luer and plug Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer and plug	6.	Silicone 3/16 id*3/8 od*5 cm, needleless sampling
					7.	C-Flex 1/8 id*1/4 od*100 cm female Luer and plug Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer and plug
			3.4	Air filter	8.9	pH, DO senso

* All connected by non-adjustable straight connectors

Volume	Version	Product code	Configuration	
20 L	Basic cell bag	BIOBGWBAP 020LC102	1.2	NA
			3.4	Air filter
			5.	C-Flex 1/4 id *7/16 od*100 cm female MPC
			6.	C-Flex 1/8 id *1/4 od*100 cm female Luer and plug
20 L	pH & DO cell bag	BIOBGWBAP 020LC202	1.	NA
			2.	C-Flex 3/8 id *5/8 od*100 cm plug
			3.4	Air filter
			5.	Silicone 3/8 id *5/8 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag
20 L	Perfusion cell bag	BIOBGWBAP 020LC305	1.	Y-connector (attached to perfusion filter) C-Flex 1/8 id*1/4 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug
			2.	C-Flex 3/8 id*5/8 od*100 cm plug
			3.4	Air filter
			5.	Silicone 3/8 id*5/8 od*100cm & C-Flex*60 cm, plug, extended tube inside the bag
20 L	pH & DO & Perfusion cell bag	BIOBGWBAP 020LC405	1.	Y-connector (attached to perfusion filter) C-Flex 1/8 id*1/4 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug
			2.	C-Flex 3/8 id*5/8 od*100 cm, plug
			3.4	Air fil
			5.	Silicone 3/8 id*5/8 od*100cm & C-Flex*60 cm, plug, extended tube inside the bag



* All connected by non-adjustable straight connectors

Volume	Version	Product code	Configuration			
22 L 	Basic cell bag	BIOBGWBAP 022LC102	1.2	NA		
			3.4	Air filter	7.	Silicone 3/16 id*3/8 od*5 cm needleless sampling
			5.	C-Flex 1/4 id *7/16 od*100 cm female MPC		
			6.	C-Flex 1/8 id *1/4 od*100 cm female Luer and plug	8.9	NA
pH & DO cell bag			1.	C-Flex 1/4 id *7/16 od*100 cm plug	6.	Silicone 3/16 id *3/8 od*5 cm needleless sampling
			2.	NA	7.	C-Flex 1/8 id*1/4 od*100 cm, female Luer and plug
			3.4	Air filter		C-Flex 1/8 id*1/4 od*100 cm, female Luer and plug
			5.	Silicone 1/4 id *7/16 od*100cm & C-Flex*60 cm, plug, extended tube inside the bag	8.9	pH, DO senso
Perfusion cell bag			1.	Y-connector (attached to perfusion filter) C-Flex 1/8 id*1/4 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug	5.	Silicone 3/8 id*5/8 od*100cm & C-Flex*60 cm, plug, extended tube inside the bag
			2.	C-Flex 3/8 id*5/8 od*100 cm plug	6.	Silicone 3/16 id*3/8 od*5 cm needleless sampling
			3.4	Air filter	7.	C-Flex 1/8 id*1/4 od*100 cm female Luer and plug Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer and plug
					8.9	NA
pH & DO & Perfusion cell bag			1.	Y-connector (attached to perfusion filter) C-Flex 1/8 id*1/4 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug	5.	Silicone 3/8 id*5/8 od*100 cm & C-Flex*60 cm, plug, extended tube inside the bag
			2.	C-Flex 3/8 id*5/8 od*100 cm plug	6.	Silicone 3/16 id*3/8 od*5 cm, needleless sampling
			3.4	Air filter	7.	C-Flex 1/8 id*1/4 od*100 cm female Luer and plug Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer and plug
					8.9	pH, DO senso

* All connected by non-adjustable straight connectors

Volume

Version

Product code

Configuration

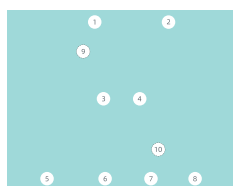
Basic cell bag	BIOBGWBAP	1.2	NA	
	050LC102	3.4	Air filter	7. Silicone 3/16 id*3/8 od*5 cm needleless sampling
		5.	C-Flex 1/8 id *1/4 od*100 cm female MPC and plug	8. NA
	BIOBGWBAP	6.	C-Flex 1/4 id *7/16 od*100 cm female Luer and plug	9.10 NA
	050LS102			

pH & DO cell bag		1.8	C-Flex 3/8 id *5/8 od*100 cm plug	
	BIOBGWBAP	2.	NA	7. C-Flex 1/8 id*1/4 od*100 cm female Luer and plug
	050LC202	3.4	Air filter	C-Flex 1/8 id*1/4 od*100 cm, female Luer and plug
		5.	Silicone 3/8 id *5/8 od*100cm & C-Flex*60 cm, plug, extended tube inside the bag	9.10 pH, DO sensor
	BIOBGWBAP	6.	Silicone 3/16 id *3/8 od*5 cm needleless sampling	
	050LS202			

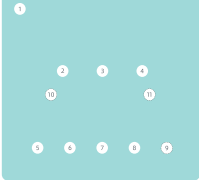
Perfusion cell bag		1.	Y-connector (attached to perfu- sion filter)	6. Silicone 3/16 id*3/8 od*5 cm needleless sampling
	BIOBGWBAP		C-Flex 1/8 id*1/4 od*6 cm, needleless sampling	7. NA
	050LC305		Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug	8. C-Flex 1/8 id*1/4 od*100 cm female Luer and plug
		2.	C-Flex 3/8 id*5/8 od*100 cm plug	Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer and plug
	BIOBGWBAP	3.4	Air filter	9.10 NA
	050LS305	5.	Silicone 3/8 id*5/8 od*100cm & C-Flex*60 cm, plug, extended tube inside the bag	

pH & DO & Perfusion cell bag		1.	Y-connector (attached to perfu- sion filter)	6. Silicone 3/16 id*3/8 od*5 cm needleless sampling
	BIOBGWBAP		C-Flex 1/8 id*1/4 od*6 cm, needleless sampling	7. NA
	050LC405		Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, plug	8. C-Flex 1/8 id*1/4 od*100 cm female Luer and plug
		2.	C-Flex 3/8 id*5/8 od*100 cm plug	Silicone 1/8 id*1/4 od*100 cm & C-Flex*60 cm, female Luer and plug
	BIOBGWBAP	3.4	Air filter	9.10 NA
	050LS405	5.	Silicone 3/8 id*5/8 od*100cm & C-Flex*60 cm, plug, extended tube inside the bag	

50 L



* All connected by non-reducing straight connectors

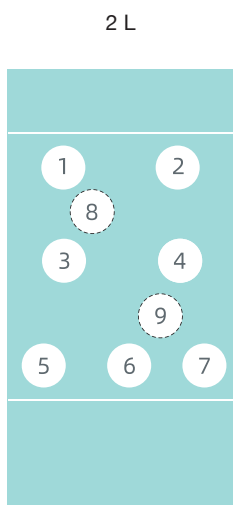
Volume	Version	Product code	Configuration			
100 L 	Basic cell bag	BIOBGWBAP 100LC102	1.	Silicone 3/8 id* 5/8 od* 150 cm & C-Flex *50 cm, plug		
			2.3.4	Air filter		
			5.	Silicone 3/8 id* 5/8 od* 150cm needless sampling & C-Flex *50 cm, plug, extendedtube inside the bag		
			6.	Silicone 1/8 id* 1/4 od* 150 cm & C-Flex *50 cm, female Luer and plug		
	pH & DO cell bag	BIOBGWBAP 100LC202		Silicone 1/8 id* 1/4 od * 150 cm & C-Flex *50 cm, female Luer and plug		
			7.	Silicone 1/4 id* 7/16 od* 5 cm needless sampling		
			8.	C-Flex 1/4 id* 7/16 od* 200 cm plug		
			9.	Silicone 1/8 id* 1/4 od* 150cm &C-Flex *50 cm, plug		
	Basic cell bag	BIOBGWBAP 200LC102	10.11	NA		
			1.	Silicone 3/8 id* 5/8 od* 150 cm & C-Flex *50 cm, plug		
			2.3.4	Air filter		
			5.	Silicone 3/8 id* 5/8 od* 150cm needless sampling & C-Flex *50 cm, plug, extendedtube inside the bag		
200 L 	pH & DO cell bag	BIOBGWBAP 200LC202	6.	Silicone 1/8 id* 1/4 od* 150cm & C-Flex *50 cm, female Luer and plug		
				Silicone 1/8 id* 1/4 od * 150 cm & C-Flex *50 cm, female Luer and plug		
			7.	Silicone 1/4 id* 7/16 od* 5 cm needless sampling		
			8.	C-Flex 1/4 id* 7/16 od* 200 cm plug		
	Basic cell bag	BIOBGWBAP 200LC102	9.	Silicone 1/8 id* 1/4 od* 150 cm &C-Flex *50 cm, plug		
			10.11	NA		
			1.	Silicone 3/8 id* 5/8 od* 150 cm & C-Flex *50 cm, plug		
			2.3.4	Air filter		
	pH & DO cell bag	BIOBGWBAP 200LC202	5.	Silicone 3/8 id* 5/8 od* 150cm needless sampling & C-Flex *50 cm, plug, extendedtube inside the bag		
			6.	Silicone 1/8 id* 1/4 od* 150cm & C-Flex *50 cm, female Luer and plug		
				Silicone 1/8 id* 1/4 od * 150 cm & C-Flex *50 cm, female Luer and plug		
			7.	Silicone 1/4 id* 7/16 od* 5 cm needless sampling		
	pH & DO cell bag	BIOBGWBAP 200LC202	8.	C-Flex 1/4 id* 7/16 od* 200 cm plug		
			9.	Silicone 1/8 id* 1/4 od* 150cm &C-Flex *50 cm, plug		
			10.11	pH,DO sensor		

Ordering information

For novel therapies

FL140C multilayer co-extruded film, EVA liquid contact layer, soft membrane

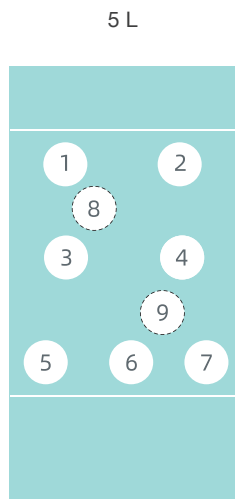
Volume	Version	Product code	Configuration	
2 L	Basic cell therapy bag	BIOBGWBCT 002LC101	1.2	NA
			3.4	Air filter
			5.	Silicone 1/8 id *1/4 od*70 cm & PVC 1/8 id *3/16 od *50 cm, female Luer and plug
			6.	NA
	pH & DO cell therapy bag	BIOBGWBCT 002LC201	7.	Silicone 3/16 id*3/8 od*5 cm needleless sampling
			8.9	NA
			1.	NA
			2.	VC 1/8 id*3/16 od*100 cm, female Luer and plug Silicone 1/8 id *1/4 od*100 cm & PVC 1/8 id*3/16 od*60 cm, female Luer and plug
	Perfusion cell therapy bag	BIOBGWBCT 002LC303	3.4	Air filter
			5.	Silicone 1/4 id *7/16 od*100cm & PVC*60 cm, plug, extended tube inside the bag
			6.	Silicone 3/16 id*3/8 od*5 cm needleless sampling
			7.	NA
	pH & DO & Perfusion cell therapy bag	BIOBGWBCT 002LC403	8.9	pH, DO senso
			1.	Y-connector (attached to perfusion filter) PVC 1/8 id*3/16 od*6 cm, needleless sampling
			5.	Silicone 1/8 id*1/4 od*100 cm & PVC 1/8 id *3/16 od *60 cm, female Luer and plug
			6.	Silicone 3/16 id*3/8 od*5 cm needleless sampling
	pH & DO & Perfusion cell therapy bag	BIOBGWBCT 002LC403	7.	NA
			8.9	pH, DO senso
			1.	Y-connector (attached to perfusion filter) PVC 1/8 id*3/16 od*6 cm, needleless sampling
			5.	Silicone 1/4 id*7/16 od*100cm & PVC*60 cm, plug, extended tube inside the bag
	pH & DO & Perfusion cell therapy bag	BIOBGWBCT 002LC403	6.	Silicone 3/16 id*3/8 od*5 cm needleless sampling
			7.	NA
			8.9	pH, DO senso
			3.4	Air filter



* All connected by non-adjustable straight connectors

* The minimum culture volume for 2 L pH & DO & perfusion cell bag is 400 ml

Volume	Version	Product code	Configuration	
5 L	Basic cell therapy bag	BIOBGWBCT 005LC101	1.2 NA 3.4 Air filter 5. Silicone 1/8 id *1/4 od*70 cm & PVC 1/8 id *3/16 od *50 cm, female Luer and plug	6. NA 7. Silicone 3/16 id*3/8 od*5 cm needleless sampling 8.9 NA
	pH & DO cell therapy bag	BIOBGWBCT 005LC201	1. NA 2. VC 1/8 id*3/16 od*100 cm, female Luer and plug 3.4 Air filter 5. Silicone 1/4 id *7/16 od*100cm & PVC*60 cm, plug, extended tube inside the bag	6. Silicone 3/16 id *3/8 od*5 cm needleless sampling 7. NA 8.9 pH, DO senso
	Perfusion cell therapy bag	BIOBGWBCT 005LC303	1. Y-connector (attached to perfusion filter) PVC 1/8 id*3/16 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & PVC 1/8 id *3/16 od *60 cm, female Luer and plug 2. VC 1/8 id*3/16 od*100 cm, female Luer and plug Silicone 1/8 id *1/4 od*100 cm & PVC 1/8 id*3/16 od*60 cm, female Luer and plug 3.4 Air filter	5. Silicone 1/4 id*7/16 od*100 cm & PVC*60 cm, plug, extended tube inside the bag 6. Silicone 3/16 id*3/8 od*5 cm needleless sampling 7. NA 8.9 NA
	pH & DO & Perfusion cell therapy bag	BIOBGWBCT 005LC403	1. Y-connector (attached to perfusion filter) PVC 1/8 id*3/16 od*6 cm, needleless sampling Silicone 1/8 id*1/4 od*100 cm & PVC 1/8 id *3/16 od *60 cm, female Luer and plug 2. VC 1/8 id*3/16 od*100 cm, female Luer and plug Silicone 1/8 id *1/4 od*100 cm & PVC 1/8 id*3/16 od*60 cm, female Luer and plug 3.4 Air filter	5. Silicone 1/4 id*7/16 od*100 cm & PVC*60 cm, plug, extended tube inside the bag 6. Silicone 3/16 id*3/8 od*5 cm needleless sampling 7. NA 8.9 pH, DO senso



* All connected by non-reducing straight connectors

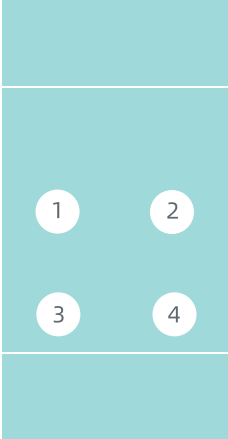
Volume	Version	Product code	Configuration	
10 L	Basic cell therapy bag	BIOBGWBCT 010LC101	1.2	NA
			3.4	Air filter
			5.	Silicone 1/4 id *7/16 od*70 cm & PVC*50 cm, female Luer and plug
			6.	Silicone 1/8 id *1/4 od*70 cm & PVC 1/8 id *3/16 od *50 cm, female Luer and plug
10 L	pH & DO cell therapy bag	BIOBGWBCT 010LC201	7.	Silicone 3/16 id*3/8 od*5 cm needleless sampling
			8.9	NA
			1.	NA
			2.	VC 1/8 id*3/16 od*100 cm, female Luer and plug Silicone 1/8 id *1/4 od*100 cm & PVC 1/8 id*3/16 od*60 cm, female Luer and plug
10 L	Perfusion cell therapy bag	BIOBGWBCT 010LC303	3.4	Air filter
			5.	Silicone 1/4 id *7/16 od*100 & PVC*60 cm, plug, extended tube inside the bag
			6.	Silicone 3/16 id *3/8 od*5 cm needleless sampling
			7.	NA
10 L	pH & DO & Perfusion cell therapy bag	BIOBGWBCT 010LC403	8.9	pH, DO senso
			5.	Y-connector (attached to perfusion filter) PVC 1/8 id*3/16 od*6 cm, needleless sampling
			6.	Silicone 1/8 id*1/4 od*100 cm & PVC 1/8 id *3/16 od *60 cm, female Luer and plug
			7.	VC 1/4 id*7/16 od*100 cm, plug
10 L	pH & DO & Perfusion cell therapy bag	BIOBGWBCT 010LC403	3.4	Air filter
			5.	Silicone 1/4 id*7/16 od*100cm & PVC*60 cm, plug, extended tube inside the bag Silicone 3/16 id*3/8 od*5 cm, needleless sampling
			6.	PVC 1/8 id*3/16 od*100 cm, female Luer and plug Silicone 1/8 id *1/4 od*100 cm & PVC 1/8 id*3/16 od*60 cm, female Luer and plug
			8.9	NA
10 L	pH & DO & Perfusion cell therapy bag	BIOBGWBCT 010LC403	5.	Silicone 1/4 id*7/16 od*100cm & PVC*60 cm, plug, extended tube inside the bag Silicone 3/16 id*3/8 od*5 cm, needleless sampling
			6.	PVC 1/8 id*3/16 od*100 cm, female Luer and plug Silicone 1/8 id *1/4 od*100 cm & PVC 1/8 id*3/16 od*60 cm, female Luer and plug
			7.	VC 1/4 id*7/16 od*100 cm, plug
			8.9	pH, DO senso

* All connected by non-adjustable straight connectors

Ordering information

Mixing function

FL9101 multilayer co-extruded film, ULDPE liquid contact layer, heat resistance up to 65°C

Volume	Version	Product code	Configuration
1 L 	Mixing bag	BIOBGWBMR001LC101	1. C-Flex 1/4 id*7/16 od*100 cm, female MPC 2. C-Flex 1/8 id*1/4 od*100 cm, female Luer 3. C-Flex 1/4 id*7/16 od*100 cm, male MPC 4. Silicone 3/16 id*3/8 od*5 cm, needleless sampling

* All connected by non-adjustable straight connectors

Volume	Version	Product code	Configuration
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20 L

Mixing bag

BIOBGWBMR 020LC101

1.2

C-Flex 1/4 id*7/16 od*100 cm, female MPC

3.

C-Flex 1/4 id*7/16 od*100 cm, male MPC

4.

C-Flex 1/8 id*1/4 od*100 cm, female Luer

5.

Silicone 3/16 id*3/8 od*5 cm, needleless sampling

22 L

Mixing bag

BIOBGWBMR 022LC101

1.2

C-Flex 1/4 id*7/16 od*100 cm, female MPC

3.

Silicone 3/16 id*3/8 od*5 cm, needleless sampling

4.

C-Flex 1/8 id*1/4 od*100 cm, female Luer

5.

C-Flex 1/4 id*7/16 od*100 cm, male MPC

50 L

Mixing bag

BIOBGWBMR 050LC101

1.2

C-Flex 1/4 id*7/16 od*100 cm, female MPC

3.

C-Flex 1/4 id*7/16 od*100 cm, male MPC

4.

C-Flex 1/8 id*1/4 od*100 cm, female Luer

5.

Silicone 3/16 id*3/8 od*5 cm, needleless sampling

BIOBGWBMR 050LS101

* All connected by non-adjustable straight connectors

Bio Bag

22

Features of BIOGBRCF Single-Use Bottom-Driven Mixing Bioreactor Bags

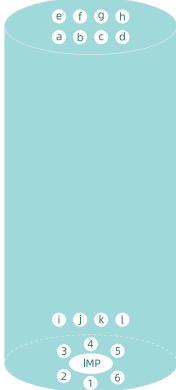
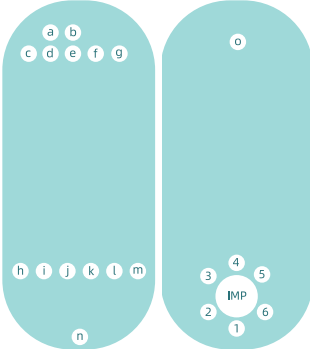
BIOGBRCF Single-Use Bottom-Driven Mixing Bioreactor Bags are designed to match single-use bioreactors used in biopharmaceuticals. The product can be used for scientific research, process development and commercial production of CHO, Vero, and MDCK cells.

- With RENOLIT 9101 multi-layer co-extrusion films, the fluid contact layer is ultra-low density polyethylene (ULDPE), which has good biocompatibility and chemical compatibility and contributes to a low level of extractable
- The ventilation tray contains 6 ventilation dial components, and the ventilation aperture is available in 35 μm , 300 μm , and 1 mm, with good aperture uniformity. Free combinations of micro, medium, and macro sparges are supported to meet different process requirements
- The impeller of 2000 L bioreactor bags are made of engineering-grade plastic Peek for high hardness. The N40E design has a lower shear force and a shorter mixing time
- Standard imported filters to ensure the integrity of bags
- Customized tubings
- Comprehensive validations with completed validation reports

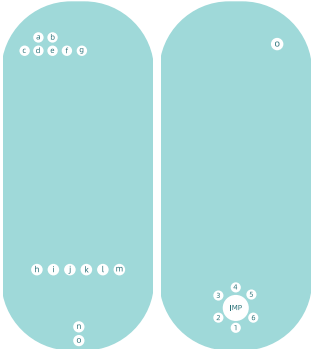


BIOGBR Single-Use Bioreactor (2000 L) and Controller

Standard Configuration of BIOGBRCF Single-Use Bottom-Driven Mixing Bioreac-tor Bags

Volume	Version	Product code	Configuration
50 L 	Medium + Macro sparge	BIOGBRCF0050P101	- Min. working volume: 15 L - Max. working volume: 50 L - Impeller: M40e, 3-blade, diameter: 216 mm, angle: 40°, bottom-driven centric mixing
	Micro + Macro sparge	BIOGBRCF0050P201 BIOGBRCF0050P203	- e, c (inlet): 205 cm 3/8" × 5/8" C-Flex™ 374, plug - a, g (inlet): 60 cm 3/8" × 5/8" C-Flex™ 374, plug - h, d (small feed port): 205 cm 1/8" × 1/4" C-Flex™ 374, plug - f (vent filter): CS2VTV0.2-002 (Meissner), T-connector tube 1: 60 cm 1/2" × 3/4" C-Flex™ 374, plug; tube 2: 28 cm 1/2" × 3/4" C-Flex™ 374
	Macro sparge	BIOGBRCF0050P301 BIOGBRCF0050P303	- b (headspace gas): pressure sensor, CS2VTV0.2-002 (Meissner), 45 cm 1/2" × 3/4" C-Flex™ 374 + 16 cm 1/4" × 7/16" C-Flex™ 374, tc 25 + 6# quick plug for gas tubing - i (sampling port): 50 cm 1/8" × 1/4" C-Flex™ 374 (× 2), needleless sampling (× 2) - j, k (sensor): female Kleenpak™ connector, 1/2" HB - l (sensor): thermowell, ID 3.5 mm
	Medium sparge	BIOGBRCF0050P401	1, 3, 5 (harvest tubing): 128 cm 3/8" × 5/8" C-Flex™ 374, hose plug, OD 1/8"–1" pinch valve 2, 4, 6 (bottom gas): CS2VTV0.2-002 (Meissner), 153 cm 1/4" × 7/16" C-Flex™ 374, tc 25 + 6# quick plug for gas tubing (only 1 filter is available for macro sparge and medium sparge)
200 L 	Medium + Macro sparge	BIOGBRCF0200P101	- Min. working volume: 40 L - Max. working volume: 200 L - Impeller: M40e, 3-blade, diameter 216 mm, angle 40°, bottom-driven eccentric mixing
	Micro + Macro sparge	BIOGBRCF0200P201 BIOGBRCF0200P203	- a, b (small feed port): 305 cm 1/8" × 1/4" C-Flex™ 374, plug - c, g (inlet): 305 cm 3/8" × 5/8" C-Flex™ 374, plug - d, f (inlet): 60 cm 3/8" × 5/8" C-Flex™ 374, plug - e (headspace gas): pressure sensor, CF2VTV0.2-33B1 (Meissner), 75 cm 1/2" × 3/4" C-Flex™ 374 + 16 cm 1/4" × 7/16" C-Flex™ 374, tc 25 + 6# quick plug for gas tubing
	Macro sparge	BIOGBRCF0200P301 BIOGBRCF0200P303	- o (vent filter): CL2VTV0.2-002 (Meissner), T-connector tube 1: 25 cm 3/4" × 1" C-Flex™ 374, plug; tube 2: 60 cm 1/2" × 3/4" C-Flex™ 374 - h (sampling port): 50 cm 1/8" × 1/4" C-Flex™ 374 (× 2), needleless sampling (× 2) - i, j, k, l (sensor): female Kleenpak™ connector, 1/2" HB - m (sensor): thermowell, ID 3.5 mm
	Medium sparge	BIOGBRCF0200P401	- n (harvest tubing): 90 cm 1/2" × 3/4" C-Flex™ 374, plug, OD 1/8"–1" pinch valve 1, 2, 3, 4, 5, 6 (bottom gas): CF2VTV0.2-33B1 (Meissner), 233 cm 1/4" × 7/16" C-Flex™ 374, tc 25 + 6# quick plug or gas tubing

Volume	Version	Product code	Configuration
500 L	Medium + Macro sparge	BIOGBRCF0500P101	- Min. working volume: 100 L - Max. working volume: 500 L - Impeller: M40e, 3-blade, diameter 266 mm, angle 40°, bottom-driven eccentric mixing
	Micro + Macro sparge	BIOGBRCF0500P201 BIOGBRCF0500P203	- a, b (small feed port): 320 cm 1/8" × 1/4" C-Flex™ 374, plug - c, g (inlet): 320 cm 3/8" × 5/8" C-Flex™ 374, plug - d, f (inlet): 60 cm 3/8" × 5/8" C-Flex™ 374, plug - e (headspace gas): pressure sensor, CF2VT0.2-33B1 (Meissner), 85 cm 1/2" × 3/4" C-Flex™ 374 + 16 cm 1/4" × 7/16" C-Flex™ 374, tc 25 + 6# quick plug for gas tubing - o (vent filter): CL2VT0.2-002 (Meissner), T-connector tube 1: 30 cm 3/4" × 1" C-Flex™ 374, plug; tube 2: 60 cm 1/2" × 3/4" C-Flex™ 374
	Macro sparge	BIOGBRCF0500P301 BIOGBRCF0500P303	- h (sampling port): 50 cm 1/8" × 1/4" C-Flex™ 374 (× 2), needleless sampling (× 2) - i, j, k, l (sensor): female Kleenpak™ connector, 1/2" HB - m (sensor): thermowell, ID 3.5 mm - n (harvest tubing): 90 cm 1/2" × 3/4" C-Flex™ 374, plug, OD 1/8"-1" pinch valve
	Medium sparge	BIOGBRCF0500P401	1, 2, 3, 4, 5, 6 (bottom gas): CF2VT0.2-33B1 (Meissner), 263 cm 1/4" × 7/16" C-Flex™ 374, tc 25 + 6# quick plug or gas tubing
1000 L	Medium + Macro sparge	BIOGBRCF1000P101	- Min. working volume: 200 L - Max. working volume: 1000 L - Impeller: M40e, 3-blade, diameter 317 mm, angle 40°, bottom-driven eccentric mixing
	Micro + Macro sparge	BIOGBRCF1000P201 BIOGBRCF1000P203	- a, b (small feed port): 340 cm 1/8" × 1/4" C-Flex™ 374, plug - c, d, f, g (inlet): 340 cm 1/2" × 3/4" C-Flex™ 374, plug - e (headspace gas): pressure sensor, CF2VT0.2-33B1 (Meissner), 75 cm 1/2" × 3/4" C-Flex™ 374 + 16 cm 1/4" × 7/16" C-Flex™ 374, tc 25 + 6# quick plug for gas tubing - o (vent filter): CU2VT0.2-1N002 (Meissner), T-connector, tube 1: 30 cm 3/4" × 1" C-Flex™ 374, plug; tube 2: 60 cm 1/2" × 3/4" C-Flex™ 374
	Macro sparge	BIOGBRCF1000P301 BIOGBRCF1000P303	- h (sampling port): 50 cm 1/8" × 1/4" C-Flex™ 374 (× 2), needleless sampling (× 2) - i, j, k, l (sensor): female Kleenpak™ connector, 1/2" HB - m (sensor): thermowell, ID 3.5 mm - n (harvest tubing): 90 cm 1" × 1-3/8" C-Flex™ 374, plug, PureFit TCL stop clamp, OD 1-3/8", WALL 3/16"
	Medium sparge	BIOGBRCF1000P401	1, 2, 3, 4, 5, 6 (bottom gas): CS2VT0.2-002 (Meissner), 288 cm 1/4" × 7/16" C-Flex™ 374, tc 25 + 6# quick plug or gas tubing

Volume	Version	Product code	Configuration
 2000 L	Medium + Macro sparge	BIOGBRCF2000P101	- Min. working volume: 400 L - Max. working volume: 2000 L - Impeller: M40e, 4-blade, diameter 419 mm, angle 40°, bottom-driven eccentric mixing
	Micro + Macro sparge	BIOGBRCF2000P201 BIOGBRCF2000P203	- a, b (small feed port): 380 cm 1/8" x 1/4" C-Flex™ 374, plug - c, d, f, g (inlet): 380 cm 1/2" x 3/4" C-Flex™ 374, plug - e (headspace gas): pressure sensor, CF2VTV0.2-33B1 (Meissner), 150 cm 1/2" x 3/4" C-Flex™ 374 + 20 cm 1/4" x 7/16" C-Flex™ 374, tc 25 + 6# quick plug for gas tubing
	Macro sparge	BIOGBRCF2000P301 BIOGBRCF2000P303	- o (vent filter): CU2VTV0.2-1N002 (Meissner), Y-connector, tube 1: 35 cm 3/4" x 1" C-Flex™ 374, plug; tube 2: 60 cm 3/4" x 1" C-Flex™ 374 - h (sampling port): 50 cm 1/8" x 1/4" C-Flex™ 374 (x 2), needleless sampling (x 2)
	Medium sparge	BIOGBRCF2000P401	- i, j, k, l (sensor): female Kleenpak™ connector, 1/2" HB - m (sensor): thermowell, ID 3.5 mm - n (harvest tubing): 90 cm 1" x 1-3/8" C-Flex™ 374, plug, PureFit TCL stop clamp, OD 1-3/8", WALL3/16"
			1, 2, 3, 4, 5, 6 (bottom gas): CS2VTV0.2-002 (Meissner), 318 cm 1/2" x 3/4" C-Flex™ 374, tc 25 + 6# quick plug or gas tubing

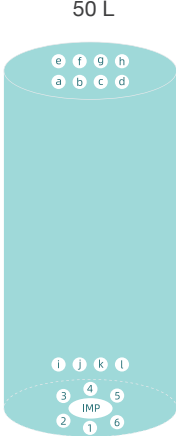


Single-Use Top-Driven Bioreactor Bag

The core of the BIOGBRCF 50L microbial fermentation system is the single-use microbial bioreactor bag designed to meet the stringent requirements of microbial fermentation. It is used for cultivating various organisms, including E-coli, pseudomonas, and yeast. The single-use microbial reactor bag is based on the proven design and materials of the BIOGBRCF single-use bioreactor bags for mammalian cell culture.

- RENOLIT 9101 multilayer co-extruded film, ULDPE liquid contact layer, offering excellent biocompatibility and chemical compatibility while ensuring low levels of extractable content
- The dual impeller design enables vigorous mixing of the culture, and the bottom magnetic coupling eliminates external shafts, minimizing the risk of leakage
- All single-use microbial bioreactor bags are equipped with pressure sensors to maintain bag integrity during demanding fermentation processes
- The vent filter is equipped with a condensation bag at the front end to integrate

Standard Configuration of BIOGBRCF Single-Use Bottom-Driven Microbial Bioreactor Bag

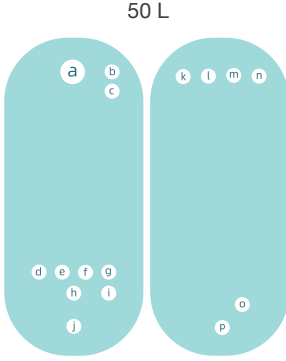
Volume	Version	Product code	Configuration
 50 L	Medium sparge	BIOGBRCF 0050P404	• Min. working volume: 15 L • Max. working volume: 50 L • Impeller: double-layer, 6 Rushton blades, pitch blade at the top, axial flow impeller, diameter: 195 mm, bottom-driven centric mixing • a, b, e (feeding port): 05 cm 1/8" x 1/4" C-Flex, hose plug • c (pressure monitoring): pressure sensor, 45 cm 1/2" x 3/4" C-Flex, hose plug • d (vent filter + condensation bag):: 37 cm 1" x 1-3/8" C-Flex, condensation bag, 20 cm 1" x 1-3/8" C-Flex, L10SSAPBBG1P, 35 cm 1" x 1-3/8" C-Flex, L05SSAPBBG1P
	Macro sparge	BIOGBRCF 0050P304	• f (feeding port): 205 cm 1/8" x 1/4" C-Flex (×2) , hose plug (×2) • g (spare vent filter inlet) : 30 cm 1" x 1-3/8" C-Flex , AseptiQuik® L sterile connector; • h (intlet): 205 cm 3/8" x 5/8" C-Flex, hose plug • i (sampling port): 50 cm 1/8" x 1/4" C-Flex(× 2), sterile sampling valve (× 2) • j, k (sensor): Kleenpak™ sterile connector female adapter
	Medium + Macro sparge	BIOGBRCF 0050P104	• l (sensor): thermowell, ID3.5 mm • 1, 3, 5 (harvest tubing): 128 cm 3/8" x 5/8" C-Flex, hose plug, OD1/8"-OD1" pinch valve • 2, 4, 6 (bottom gas): CL2VT0.2-002 (Meissner), 168 cm 1/4" x 7/16" C-Flex, TC 25 + 6 # quick plug for gas tubing (Only one filter for pure medium sparge and pure macro sparge)

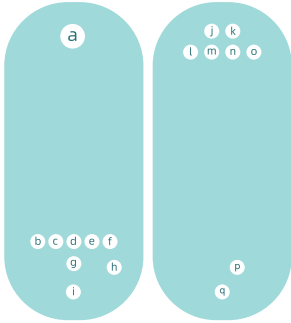
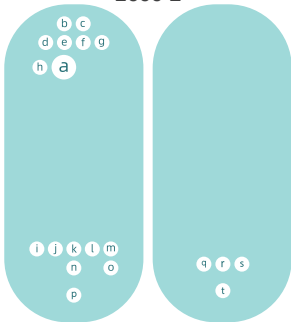
Features of BIOGBRTF Single-Use Top-Driven Bioreactor Bag

BIOGBRTF Single-Use Top-Driven Bioreactor Bag is designed to match single-use top mechanical coupling bioreactors used in biopharmaceuticals. The product can be used for scientific research, process development and commercial production of CHO, Vero, and MDCK cells, etc.

- RENOLIT 9101 multilayer co-extruded film, ULDPE fluid contact layer, offering excellent biocompatibility and chemical compatibility while ensuring low levels of extractable content
- The porous-frit microsparge column is designed from ultra-high molecular weight polyethylene (UHMW-PE), with pore sizes ranging from 20-40 μm . The generated bubbles possess a high surface area ratio and enhanced oxygen transfer. UHMW-PE exhibits outstanding impact resistance, wear resistance, chemical corrosion resistance, physiological inertness, adaptability, and hydrophobicity
- The macro-perforated microporous membrane is a dispersed aeration disc based on film. Laser-drilled to maintain uniform pore size, various specifications such as 0.178mm, 0.233mm, 0.368mm, 0.445mm, 0.582mm are available, tailored with specific apertures and quantities for each bag specification
- Equipped with imported filters to ensure bag integrity
- All pipelines can be flexibly customized
- Fully validated, complete validation reports can be provided

Standard Configuration of BIOGBRTF Single-Use Bottom-Driven Bioreactor Bag

Volume	Version	Product code	Configuration
 50 L	Micro + Macro sparge 5:1	BIOGBRTF 0050C201	• a(top-driven mixing parts): 3-blade impeller, diameter: 111.1 mm, angle: 45° • b (headspace gas) : pressure sensor, CF2VTV0.2-33B1 (Meissner), 20 cm 1/2" x 3/4" C-Flex + 16 cm 1/4" x 7/16" C-Flex, 6 # quick plug for gas tubing • c (inlet / feeding port) : 150 cm 1/4" x 7/16" C-Flex, 30 cm 1/8" x 1/4" C-Flex plug • k (inlet / feeding port) : 150 cm 3/8" x 5/8" C-Flex, Y connector, tubing 1: 40 cm 3/8" x 5/8" C-Flex, plug; tubing 2: 10 cm 3/8" x 5/8" C-Flex, 30 cm 1/4" x 7/16" C-Flex, plug • l (inlet) : 180 cm 3/8" x 5/8" C-Flex, plug • n (feeding port) : 15 cm 1/4" x 7/16" C-Flex, 150 cm 1/8" x 1/4" C-Flex, plug • m (vent filter) : CS2VTV0.2-002 (Meissner), Y connector, tubing 1: 25 cm 1/2" x 3/4" C-Flex; tubing 2: 15 cm 1/2" x 3/4" C-Flex, AseptiQuik® G sterile connector, 1/2" HB
	Micro + Marco sparge 2:1	BIOGBRTF 0050C202	• d,e,f,g (sensor): AseptiQuik® G sterile connector, 1/2" HB • h (sampling port) : 30 cm 1/8" x 1/4" C-Flex, needless sampling 50 cm 1/8" x 1/4" C-Flex, plug • i (sensor) : thermowell, ID3.5 mm • j (harvest port) : 100 cm 1/2" x 3/4" C-Flex, 30 cm 3/8" x 5/8" C-Flex, plug • o,p(bottom gas): CF2VTV0.2-33B1 (Meissner), 15 cm 1/4" x 7/16" C-Flex, one-way valve, 150 cm 1/4" x 7/16" C-Flex, 6 # quick plug for tubing

Volume	Version	Product code	Configuration
1000 L 	Micro + Macro sparge 5:1	BIOBGBRTF 1000C201	- a (top-driven mixing parts) : 3-blade impeller, diameter: 321 mm, angle :45° - k (headspace gas) : pressure sensor , CS2VTV0.2-002 (Meissner), 50 cm 1/2" x 3/4" C-Flex + 20 cm 1/4" x 7/16"C-Flex, 6# quick plug for gas tubing - l (feeding port) : 15 cm 1/4" x 7/16" C-Flex, 250 cm 1/8" x 1/4" C-Flex, plug - m (intlet / feeding port) : 250 cm 1/4" x 7/16" C-Flex, 30 cm 1/8" x 1/4" C-Flex, plug - n,o (intlet / feeding port) : 250 cm 3/8" x 5/8" C-Flex, connector, tubing 1: 30 cm 3/8" x 5/8" C-Flex, plug; tubing 2: 20 cm 3/8" x 5/8" C-Flex, 35 cm 1/8" x 1/4" C-Flex, plug - j (vent filter) : CUVTV0.2-1N002 (Meissner)×2, connector, tubing 1: 25 cm 3/4" x 1" C-Flex; tubing 2: 25 cm 3/4" x 1" C-Flex - b,c,d,e,f (sensor) : AseptiQuik® G sterile connector, 1/2"HB - g (sampling port) : 30 cm 1/8" x 1/4" C-Flex, needless sampling; 80 cm 1/8" x 1/4" C-Flex, plug - h (sensor) : thermowell, ID3.5 mm - i (harvest port) : 160 cm 1/2" x 3/4" C-Flex, 30 cm 3/8" x 5/8" C-Flex, connector tubing 1: 30 cm 3/8" x 5/8" C-Flex, plug; tubing 2: 20 cm 3/8" x 5/8" C-Flex, 35 cm 1/8" x 1/4" C-Flex, plug - p, q (bottom gas) : CS2VTV0.2-002 (Meissner), 16 cm 1/4" x 7/16"C-Flex, one-way valve, 185 cm 1/4" x 7/16" C-Flex, 6# quick plug for gas tubing
2000 L 	Micro + Macro sparge 5:1	BIOBGBRTF 2000C201	- a (top-driven mixing parts) : 3-blade impeller, diameter: 397 mm, angle: 45° - c (headspace gas) : pressure sensor , CS2VTV0.2-002 (Meissner), 50 cm 1/2" x 3/4" C-Flex + 30 cm 1/4" x 7/16"C-Flex, 6# quick plug for gas tubing - d,g (ifeeding port) 50 cm 1/4" x 7/16" C-Flex,220 cm 1/8" x 1/4" C-Flex, plug - e (intlet / feeding port) 220 cm 1/2" x 3/4" C-Flex,50 cm 3/8" x 5/8" C-Flex, plug - f (intlet / feeding port) 220 cm 1/4" x 7/16" C-Flex,50 cm 1/8" x 1/4" C-Flex, plug - h (intlet): 15 cm 1" x 1 - 3/8" C-Flex, connector (internal extended tube), tubing 1: 15 cm 3/4" x 1" C-Flex, 250 cm 1/2" x 3/4" C-Flex, plug; tubing 2: 15 cm 3/4" x 1" C-Flex, 250 cm 1/2" x 3/4" C-Flex, plug - b (vent filter) : CUVTV0.2-1N002 (Meissner)×2, Y connector, tubing 1: 30 cm 3/4" x 1" C-Flex; tubing 2: 30 cm 3/4" x 1" C-Flex - i,j,k,l,m (sensor) : AseptiQuik® G sterile connector, 1/2"HB - n (sampling port) : 30 cm 1/8" x 1/4" C-Flex, needless sampling; 80 cm 1/8" x 1/4" C-Flex, plug - o (sensor) : thermowell, ID3.5 mm - p (harvest port) : 200 cm 3/4" x 1" C-Flex, TC 50 - q, r, s, t (bottom gas) : CS2VTV0.2-002 (Meissner), 8 cm 1/4" x7/16" C-Flex, one-way valve, 200 cm 1/4" x 7/16" C-Flex, 6# quick plug for gas tubing

BIOBGMB Single-Use Mixing Bags are made of multi-layer co-extrusion films. The sterile storage bags are guaranteed very low gas permeability, excellent chemical compatibility and biocompatibility, and good physical strength. This ensures their safety in the preparation and storage of feed liquids in various biopharmaceutical processes. The impellers are designed with high-strength magnet and secondary coating, and complete tightness is guaranteed due to the whole coating of the magnet. The combination of the bags with different impellers contributes to efficient mixing. The flexibly designed mixing bags can be integrated with various types of sensors for online monitoring of pH, conductivity, and temperature. Also, it can be flexibly equipped with 2", 3", 4", 6", and 8" feeding ports to meet solid feeding needs.

Ordering information

Single-use cubic mixing bag

Product code	Matching type	Line 1	Line 2	Line 3	Feeding port	Film
BIOBGMBSC0050S003	Cubic stainless steel mixing system 50 L	150 cm ID3/8**OD5/8" platinum cured silicone tubing + female MPC	150 cm ID3/8**OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4**OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMBSC0050S004	Cubic stainless steel mixing system 50 L	150 cm ID3/8**OD5/8" thermoplastic tubing + plug	150 cm ID3/8**OD5/8" thermoplastic tubing + plug	30 cm ID1/4**OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMBSC0050S005	Cubic stainless steel mixing system 50 L	150 cm ID3/8**OD5/8" platinum cured silicone tubing + female MPC	150 cm ID3/8**OD5/8" platinum cured silicone tubing + female MPC	30 cm ID1/4**OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMBSC0050S006	Cubic stainless steel mixing system 50 L	150 cm ID3/8**OD5/8" thermoplastic tubing + plug	150 cm ID3/8**OD5/8" thermoplastic tubing + plug	30 cm ID1/4**OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMBSC0100S003	Cubic stainless steel mixing system 100 L	150 cm ID3/8**OD5/8" platinum cured silicone tubing + female MPC	150 cm ID3/8**OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4**OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMBSC0100S004	Cubic stainless steel mixing system 100 L	150 cm ID3/8**OD5/8" thermoplastic tubing + plug	150 cm ID3/8**OD5/8" thermoplastic tubing + plug	30 cm ID1/4**OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMBSC0100S005	Cubic stainless steel mixing system 100 L	150 cm ID3/8**OD5/8" platinum cured silicone tubing + female MPC	150 cm ID3/8**OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4**OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMBSC0100S006	Cubic stainless steel mixing system 100 L	150 cm ID3/8**OD5/8" thermoplastic tubing + plug	150 cm ID3/8**OD5/8" thermoplastic tubing + plug	30 cm ID1/4**OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMBSC0200S003	Cubic stainless steel mixing system 200 L	150 cm ID1/2**OD3/4" platinum cured silicone tubing + female MPX	150 cm ID1/2**OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4**OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMBSC0200S004	Cubic stainless steel mixing system 200 L	150 cm ID1/2**OD3/4" thermoplastic tubing + plug	150 cm ID1/2**OD3/4" thermoplastic tubing + plug	30 cm ID1/4**OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMBSC0200S005	Cubic stainless steel mixing system 200 L	150 cm ID1/2**OD3/4" platinum cured silicone tubing + female MPX	150 cm ID1/2**OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4**OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMBSC0200S006	Cubic stainless steel mixing system 200 L	150 cm ID1/2**OD3/4" thermoplastic tubing + plug	150 cm ID1/2**OD3/4" thermoplastic tubing + plug	30 cm ID1/4**OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMBSC0400S003	Cubic stainless steel mixing system 400 L	150 cm ID1/2**OD3/4" platinum cured silicone tubing + female MPX	150 cm ID1/2**OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4**OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMBSC0400S004	Cubic stainless steel mixing system 400 L	150 cm ID1/2**OD3/4" thermoplastic tubing + plug	150 cm ID1/2**OD3/4" thermoplastic tubing + plug	30 cm ID1/4**OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMBSC0400S005	Cubic stainless steel mixing system 400 L	150 cm ID1/2**OD3/4" platinum cured silicone tubing + female MPX	150 cm ID1/2**OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4**OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMBSC0400S006	Cubic stainless steel mixing system 400 L	150 cm ID1/2**OD3/4" thermoplastic tubing + plug	150 cm ID1/2**OD3/4" thermoplastic tubing + plug	30 cm ID1/4**OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic

[illegible]

Mixing bags of other models

[illegible]

[illegible]

[illegible]

[illegible]

Product code	Matching type	Line 1	Line 2	Line 3	Feeding port	Film
BIOBGMM2R1000S003	M series circular mixing system-Generation II 1000 L	150 cm ID3/4**OD1" platinum cured silicone tubing + TC50	150 cm ID3/4**OD1" platinum cured silicone tubing + TC50	30 cm ID1/4**OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMM2R1000S007	M series circular mixing system-Generation II 1000 L	150 cm ID13/4**OD1" thermoplastic tubing + plug	150 cm ID13/4**OD1" thermoplastic tubing + plug	30 cm ID1/4**OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMM2R1000S005	M series circular mixing system-Generation II 1000 L	150 cm ID3/4**OD1" platinum cured silicone tubing + TC50	150 cm ID3/4**OD1" platinum cured silicone tubing + TC50	30 cm ID1/4**OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMM2R1000S008	M series circular mixing system-Generation II 1000 L	150 cm ID13/4**OD1" thermoplastic tubing + plug	150 cm ID13/4**OD1" thermoplastic tubing + plug	30 cm ID1/4**OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMM2R2000S003	M series circular mixing system-Generation II 2000 L	150 cm ID3/4**OD1" platinum cured silicone tubing + TC50	150 cm ID3/4**OD1" platinum cured silicone tubing + TC50	30 cm ID1/4**OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMM2R2000S007	M series circular mixing system-Generation II 2000 L	150 cm ID13/4**OD1" thermoplastic tubing + plug	150 cm ID13/4**OD1" thermoplastic tubing + plug	30 cm ID1/4**OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMM2R2000S005	M series circular mixing system-Generation II 2000 L	150 cm ID3/4**OD1" platinum cured silicone tubing + TC50	150 cm ID3/4**OD1" platinum cured silicone tubing + TC50	30 cm ID1/4**OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMM2R2000S008	M series circular mixing system-Generation II 2000 L	150 cm ID13/4**OD1" thermoplastic tubing + plug	150 cm ID13/4**OD1" thermoplastic tubing + plug	30 cm ID1/4**OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMM2R3000S003	M series circular mixing system-Generation II 3000 L	150 cm ID3/4**OD1" platinum cured silicone tubing + TC50	150 cm ID3/4**OD1" platinum cured silicone tubing + TC50	30 cm ID1/4**OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Imported
BIOBGMM2R3000S007	M series circular mixing system-Generation II 3000 L	150 cm ID13/4**OD1" thermoplastic tubing + plug	150 cm ID13/4**OD1" thermoplastic tubing + plug	30 cm ID1/4**OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Imported
BIOBGMM2R3000S005	M series circular mixing system-Generation II 3000 L	150 cm ID3/4**OD1" platinum cured silicone tubing + TC50	150 cm ID3/4**OD1" platinum cured silicone tubing + TC50	30 cm ID1/4**OD7/16" platinum cured silicone tubing + needleless sampling	4" Feeding port	Domestic
BIOBGMM2R3000S008	M series circular mixing system-Generation II 3000 L	150 cm ID13/4**OD1" thermoplastic tubing + plug	150 cm ID13/4**OD1" thermoplastic tubing + plug	30 cm ID1/4**OD7/16" thermoplastic tubing + needleless sampling	4" Feeding port	Domestic



Electrode Sleeve

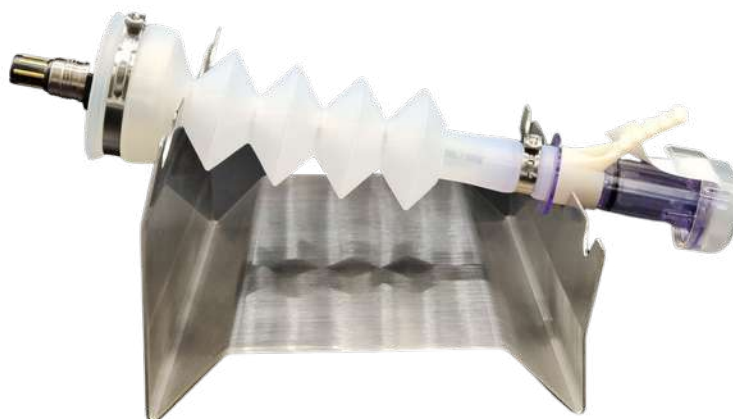
As one of the critical steps in different biopharmaceutical fields for antibody drugs, vaccines, and drugs for cell therapy and gene therapy, cell culture has direct effects on the yield and quality of drugs. The monitoring of pH and dissolved oxygen is very important during the cell culture process to ensure performance indicators, including viable cell density, cell viability, and cell unit yield. GVS Electrode Sleeve are specially designed for sterile monitoring of pH and dissolved oxygen.

Applications

Sterile connection of pH/DO electrode probe with the single-use bioreactor bag during the cell culture process.

Features

- Threaded fittings adapted to pH/DO electrodes to ensure air tightness
- The telescopic tubes of different specifications are suitable for electrodes and sterile connectors based on their lengths
- Electrode mounting clips and sterile brackets are also available
- Resistant to humid heat sterilization: temperature $\leq 135^{\circ}\text{C}$, 30 min
- Sufficient inventory of raw materials and relevant components to support the supply chain stably
- Fully compliant with biosafety requirements



KPC Electrode Sleeve with electrode bracket

Technical Parameters

Component name	Main material
KPC/AQG connector	-
Unit Polycarbonate	Polycarbonate
Telescopic tubing Silicone	Silicone
Threaded fitting PSU	PSU

Ordering information

Product	Product name	Description
BIOGBRCF000LP001	Electrode sleeve × 4	KPC series + telescopic tubing + threaded fitting + nylon snap ring, 4 pcs per group
BIOGBRCF000LP002	Electrode sleeve × 2	KPC series + telescopic tubing + threaded fitting + nylon snap ring, 2 pcs per group
BIOGBRCF000LC001	Electrode sleeve × 4	AQG series + telescopic tubing + threaded fitting + nylon snap ring, 4 pcs per group
BIOGGBR0001L361	Electrode mounting clip	Auxiliary fixed electrode clamp × 1
BIOGGBR0001L360	Electrode bracket	Sterile electrode bracket × 1



KPC Electrode Sleeve



AQG Electrode Sleeve

Single-Use Open Bags

Single-Use Open Bags are made of multi-layer co-extrusion films (PP infusion film and FL194A). The sterile storage bags are guaranteed very low gas permeability, excellent chemical compatibility and biocompatibility. This ensures their safety in the preparation and storage of feed liquids in various biopharmaceutical processes.

Features

- The open design facilitates the rapid feeding of a large volume of materials
- Flexible choice of film options and higher cost performance
- Flexibly customizable sizes, tubing, and connector
- Complete validation documents

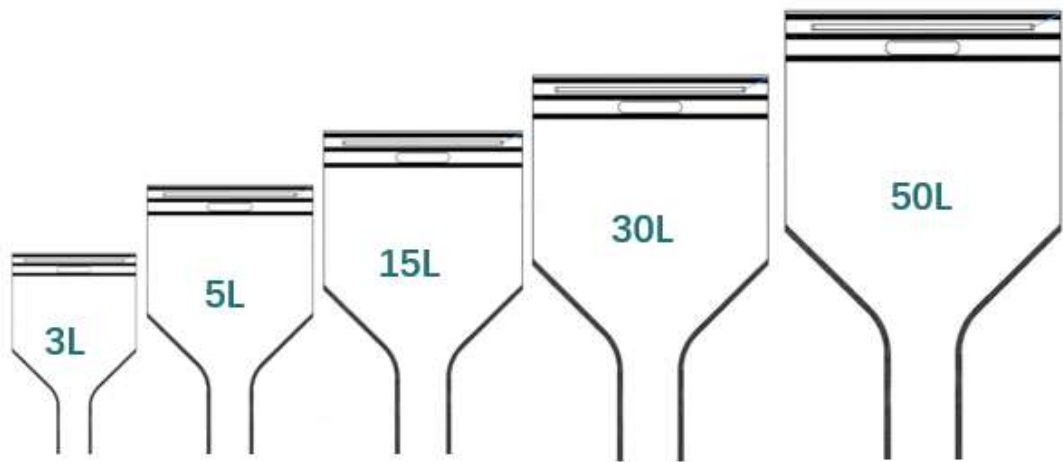
Ordering information

Product code	Matching type	Line 1	Film
BIOGBBLR0050S005		No outlet tubing	PP infusion film
BIOGBBLR0050S003	plastic bin 50 L	No outlet tubing	FL194A
BIOGBBLR0050S004		50 cm ID3/8"OD5/8" platinum cured silicone tubing + male MPC	FL194A
BIOGBBLR0100S005		No outlet tubing	PP infusion film
BIOGBBLR0100S003	plastic bin 100 L	No outlet tubing	FL194A
BIOGBBLR0100S004		50 cm ID3/8"OD5/8" platinum cured silicone tubing + male MPC	FL194A
BIOGBBLR0200S005		No outlet tubing	PP infusion film
BIOGBBLR0200S003	plastic bin 200 L	No outlet tubing	FL194A
BIOGBBLR0200S004		50 cm ID3/8"OD5/8" platinum cured silicone tubing + male MPC	FL194A
BIOGBBLR0300S005		No outlet tubing	PP infusion film
BIOGBBLR0300S003	plastic bin 300 L	No outlet tubing	FL194A
BIOGBBLR0300S004		50 cm ID1/2"OD3/4" platinum cured silicone tubing + male MPX	FL194A
BIOGBBLR0500S005		No outlet tubing	PP infusion film
BIOGBBLR0500S003	plastic bin 500 L	No outlet tubing	FL194A
BIOGBBLR0500S004		50 cm ID1/2"OD3/4" platinum cured silicone tubing + male MPX	FL194A

Product code	Matching type	Line 1	Film
BIOGBTLR0019S005		No outlet tubing	PP infusion film
BIOGBTLR0019S003	N series circular bin 19 L	No outlet tubing	FL194A
BIOGBTLR0019S004		50 cm ID1/4"*OD7/16" platinum cured silicone tubing + male MPC	FL194A
BIOGBTLR0028S005		No outlet tubing	PP infusion film
BIOGBTLR0028S003	N series circular bin 28 L	No outlet tubing	FL194A
BIOGBTLR0028S004		50 cm ID1/4"*OD7/16" platinum cured silicone tubing + male MPC	FL194A
BIOGBTLR0038S005		No outlet tubing	PP infusion film
BIOGBTLR0038S003	N series circular bin 38 L	No outlet tubing	FL194A
BIOGBTLR0038S004		50 cm ID1/4"*OD7/16" platinum cured silicone tubing + male MPC	FL194A
BIOGBTLR0057S005		No outlet tubing	PP infusion film
BIOGBTLR0057S003	N series circular bin 57 L	No outlet tubing	FL194A
BIOGBTLR0057S004		50 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	FL194A
BIOGBTLR0113S005		No outlet tubing	PP infusion film
BIOGBTLR0113S003	N series circular bin 113 L	No outlet tubing	FL194A
BIOGBTLR0113S004		50 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	FL194A
BIOGBTLR0208S005		No outlet tubing	PP infusion film
BIOGBTLR0208S003	N series circular bin 208 L	No outlet tubing	FL194A
BIOGBTLR0208S004		50 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	FL194A
BIOGBTLR0303S005		No outlet tubing	PP infusion film
BIOGBTLR0303S003	N series circular bin 303 L	No outlet tubing	FL194A
BIOGBTLR0303S004		50 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	FL194A
BIOGBTLR0378S005		No outlet tubing	PP infusion film
BIOGBTLR0378S003	N series circular bin 378 L	No outlet tubing	FL194A
BIOGBTLR0378S004		50 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	FL194A
BIOGBTLR0568S005		No outlet tubing	PP infusion film
BIOGBTLR0568S003	N series circular bin 568 L	No outlet tubing	FL194A
BIOGBTLR0568S004		50 cm ID1/2"*OD3/4" platinum cured silicone tubing + male MPX	FL194A
BIOGBTLR0050S005		No outlet tubing	PP infusion film
BIOGBTLR0050S003	T series circular bin 50 L	No outlet tubing	FL194A
BIOGBTLR0050S004		50 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	FL194A
BIOGBTLR0100S005		No outlet tubing	PP infusion film
BIOGBTLR0100S003	T series circular bin 100 L	No outlet tubing	FL194A
BIOGBTLR0100S004		50 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	FL194A
BIOGBTLR0200S005		No outlet tubing	PP infusion film
BIOGBTLR0200S003	T series circular bin 200 L	No outlet tubing	FL194A
BIOGBTLR0200S004		50 cm ID3/8"*OD5/8" platinum cured silicone tubing + male MPC	FL194A

Single-Use Powder-Feeding Bag

GVS Single-Use Powder Feeding Bags are easy to use with high recovery and do not require cleaning or sterilization. The bags are made of anti-static films; the feeding port and the bag are closely fit, effectively avoiding residues.



Powder-feeding bag

Features

- Volume range: 3 L, 5 L, 15 L, 30 L, 50 L
- Feeding port sizes: 2", 3", 4", 6", 8"
- Optional washing function: maximize the recovery of residual powder
- Soft bag body and ergonomic rods for easy operation

Ordering information

Product code	Matching type	Feeding port	Film
BIOGBBP0003S001	3 L	3" Feeding port	Anti-static film
BIOGBBP0003S002	3 L	4" Feeding port	Anti-static film
BIOGBBP0003S003	3 L	2" Feeding port	Anti-static film
BIOGBBP0005S001	5 L	3" Feeding port	Anti-static film
BIOGBBP0005S002	5 L	4" Feeding port	Anti-static film
BIOGBBP0005S003	5 L	2" Feeding port	Anti-static film
BIOGBBP0015S001	15 L	3" Feeding port	Anti-static film
BIOGBBP0015S002	15 L	4" Feeding port	Anti-static film
BIOGBBP0015S003	15 L	2" Feeding port	Anti-static film
BIOGBBP0030S001	30 L	3" Feeding port	Anti-static film
BIOGBBP0030S002	30 L	4" Feeding port	Anti-static film
BIOGBBP0030S004	30 L	6" Feeding port	Anti-static film
BIOGBBP0050S001	50 L	3" Feeding port	Anti-static film
BIOGBBP-0050-S002	50 L	4" Feeding port	Anti-static film
BIOGBBP-0050-S004	50 L	6" Feeding port	Anti-static film
BIOGBBP-0050-S005	50 L	8" Feeding port	Anti-static film

Single-Use Weighing Bag

GVS weighing bags are made of PE films and the 3D design contributes to convenient weighing.

Features

- Volume range: 1 L, 5 L, 10 L, 50 L
- Seal transfer can be achieved with a heat sealer, seling clip, or cable tie
- The 3D design facilitates weighing

Ordering information

Product code	Volume	Film
BIOGBW0001S002	1 L	PE film
BIOGBW0005S002	5 L	PE film
BIOGBW0010S002	10 L	PE film
BIOGBW0050S002	50 L	PE film
BIOGBWX200S003	200 ml	PE films for pharmaceutical packaging
BIOGBW0003S003	3 L	PE films for pharmaceutical packaging
BIOGBW0005S003	5 L	PE films for pharmaceutical packaging
BIOGBW0006S003	6 L	PE films for pharmaceutical packaging

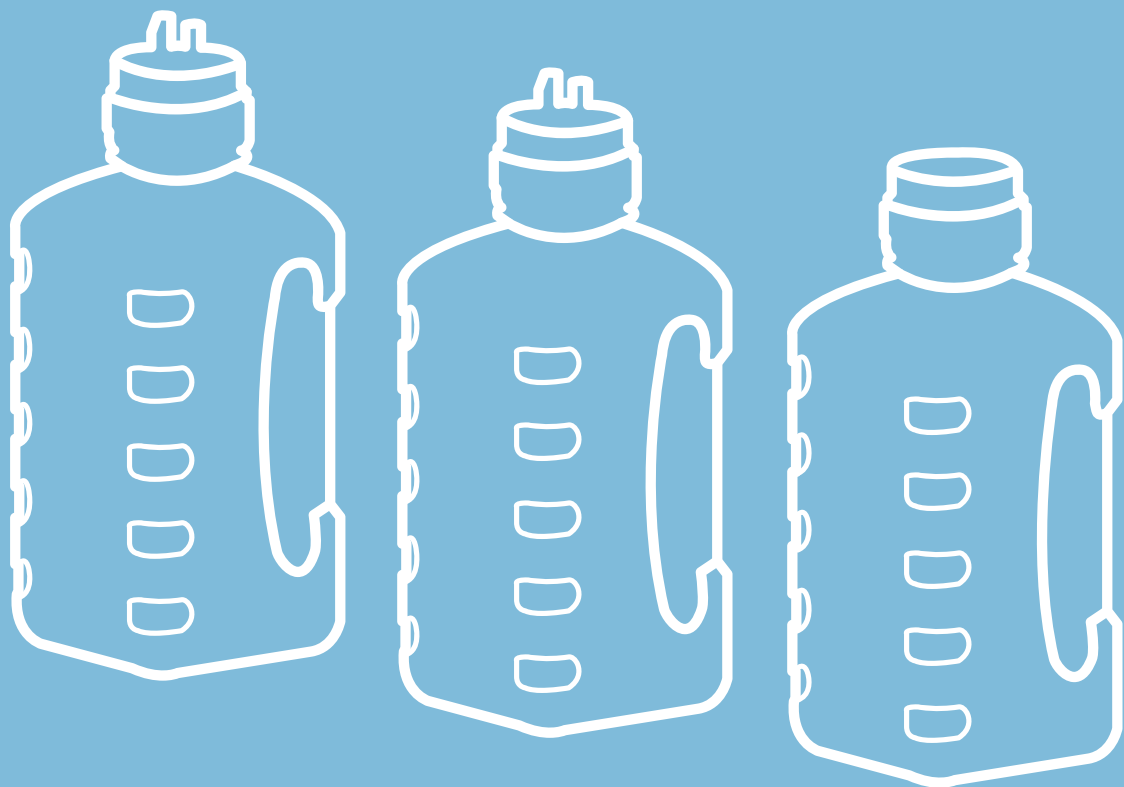
Liquid Storage Solution

The storage and transport of process fluids are critical in biopharmaceutical processes. GVS Single-Use Storage Systems are specially designed for medium storage and transfer, cell fluid clarification and collection, interim storage of filtered buffers, intermediate product storage, bulk solution storage and cryopreservation, interim storage of semi-finished products, etc. Flexible transfer can be achieved with GVS 2D Storage Bags, 3D Storage Bags, and Storage Bottles, together with different storage and transfer tools. These systems include cubic collapsible plastic boxes, circular plastic bins, 2D plastic trays, stainless steel tanks, and carts.

Storage Bottle

Single-Use Storage Bottles are designed for the storage, transport, and cryopreservation of liquids used in biopharmaceutical processes. It can be used for sensitive liquids, buffers, culture media, etc. Autoclave and gamma irradiation versions with different caps are available. There is no risk of batch-to-batch or product-to-product cross-contamination. In addition, the bottle is equipped with multiple designs of caps and can be flexibly selected by customers according to their different requirements for liquid transfer.

The caps of Single-Use Storage Bottles are available in 20 mm, 38 mm, 48 mm, and 80 mm, and are suitable for various steps of biotechnology and pharmaceutical liquid transport. The caps can be adapted to GVS liquid storage bottles as well as some foreign brand liquid storage bottles.



Features

- The bottle is made of PC material for its durability and transparency
- The cap is equipped with a silicone gasket to prevent leakage
- Volume range: 5 mL–10 L
- No additives, irradiated natural discoloration
- Fully validated to ensure safety
- Can be stored at -80°C
- Resistant to moist heat sterilization at 121°C for 30 min for 3 times
- Customization available

Validation Documents

- USP <661>
- ISO10993-4 Hemolysis
- USP<88>Class VI
- USP<87> No cytotoxicity
- USP<85> No pyrogen
- USP <788> Particulate Matter in Injections
- FDA 21 CFR 177.1580
- FDA 21 CFR 177.1520



Ordering information

Bottle with regular cap

Product code - sterile	Product code - non-sterile	Volume	Dimension L*W*H (mm)	Package	Cap
BIOGBTA5ML001	BIOGBTB5ML001	5 mL	36*36*60	200	20 mm regular cap
BIOGBTA20ML001	BIOGBTB20ML001	20 mL	36*36*80	200	
BIOGBTA50ML001	BIOGBTB50ML001	50 mL	45*45*85	120	
BIOGBTA125ML001	BIOGBTB125ML001	125 mL	54*54*120	60	38 mm regular cap
BIOGBTA250ML001	BIOGBTB250ML001	250 mL	68*68*140	40	
BIOGBTA500ML001	BIOGBTB500ML001	500 mL	74*74*190	20	
BIOGBTA1L001	BIOGBTB1L001	1 L	98*98*220	25	48 mm regular cap
BIOGBTA2L001	BIOGBTB2L001	2 L	114*114*286	16	
BIOGBTA5L001	BIOGBTB5L001	5 L	180*180*332	6	80 mm regular cap
BIOGBTA10L001	BIOGBTB10L001	10 L	240*240*361	4	



Storage bottle with 2-port cap (no tubing)

Product code - sterile	Product code - non-sterile	Volume	Dimension L*W*H (mm)	Package	Cap
BIOGBTA5ML002	BIOGBTB5ML002	5 mL	36*36*60	200	20 mm 2-port cap, no tubing
BIOGBTA20ML002	BIOGBTB20ML002	20 mL	36*36*80	200	
BIOGBTA50ML002	BIOGBTB50ML002	50 mL	45*45*85	120	
BIOGBTA125ML002	BIOGBTB125ML002	125 mL	54*54*120	60	38 mm 2-port cap, no tubing
BIOGBTA250ML002	BIOGBTB250ML002	250 mL	68*68*140	40	
BIOGBTA500ML002	BIOGBTB500ML002	500 mL	74*74*190	20	
BIOGBTA1L002	BIOGBTB1L002	1 L	98*98*220	25	48 mm 2-port cap, no tubing
BIOGBTA2L002	BIOGBTB2L002	2 L	114*114*286	16	
BIOGBTA5L002	BIOGBTB5L002	5 L	180*180*332	6	80 mm 2-port cap, no tubing
BIOGBTA10L002	BIOGBTB10L002	10 L	240*240*361	4	



Storage bottle with 3-port cap (no tubing)

Product code - sterile	Product code - non-sterile	Volume	Dimension L*W*H (mm)	Package	Cap
BIOGBTA5ML003	BIOGBTB5ML003	5 mL	36*36*60	200	20 mm 3-port cap, no tubing
BIOGBTA20ML003	BIOGBTB20ML003	20 mL	36*36*80	200	
BIOGBTA50ML003	BIOGBTB50ML003	50 mL	45*45*85	120	
BIOGBTA125ML003	BIOGBTB125ML003	125 mL	54*54*120	60	38 mm 3-port cap, no tubing
BIOGBTA250ML003	BIOGBTB250ML003	250 mL	68*68*140	40	
BIOGBTA500ML003	BIOGBTB500ML003	500 mL	74*74*190	20	
BIOGBTA1L003	BIOGBTB1L003	1 L	98*98*220	25	48 mm 3-port cap, no tubing
BIOGBTA2L003	BIOGBTB2L003	2 L	114*114*286	16	
BIOGBTA5L003	BIOGBTB5L003	5 L	180*180*332	6	80 mm 3-port cap, no tubing
BIOGBTA10L003	BIOGBTB10L003	10 L	240*240*361	4	



Storage bottle with 2-port cap (with welded tubing)

Product code - sterile	Product code - non-sterile	Volume	Dimension L*W*H (mm)	Cap	Line
BIOGBTA5ML008	BIOGBTB5ML008	5 ml	36*36*60	20 mm 2-port cap	Outer tubing 1: thermoplastic tubing, 1/8"*1/4", 30 cm, plug
BIOGBTA20ML008	BIOGBTB20ML008	20 ml	36*36*80		Outer tubing 2: silicone tubing, 1/8"*1/4", 10 cm, hydrophobic filter
BIOGBTA50ML008	BIOGBTB50ML008	50 ml	45*45*85		Inner tubing: silicone tubing, 1/8"*1/4", bottoming
BIOGBTA125ML008	BIOGBTB125ML008	125 ml	54*54*120	38 mm 2-port cap	Outer tubing 1: thermoplastic tubing, 1/4"*7/16", 30 cm, plug
BIOGBTA250ML008	BIOGBTB250ML008	250 ml	68*68*140		Outer tubing 2: silicone tubing, 1/4"*7/16", 10 cm, hydrophobic filter
BIOGBTA500ML008	BIOGBTB500ML008	500 ml	74*74*190		Inner tubing: silicone tubing, 1/8"*1/4", bottoming
BIOGBTA1L008	BIOGBTB1L008	1 L	98*98*220	48 mm 2-port cap	Outer tubing 1: thermoplastic tubing, 1/4"*7/16", 30 cm, plug
BIOGBTA2L008	BIOGBTB2L008	2 L	114*114*286		Outer tubing 2: silicone tubing, 1/4"*7/16", 10 cm, hydrophobic filter
BIOGBTA5L008	BIOGBTB5L008	5 L	180*180*332	80 mm 2-port cap	Inner tubing: silicone tubing, 1/4"*7/16", bottoming



Storage bottle with 2-port cap (with silicone tubing)

Product code - sterile	Product code - non-sterile	Volume	Dimension L*W*H (mm)	Cap	Line
BIOGBTA5ML009	BIOGBTB5ML009	5 ml	36*36*60	20 mm 2-port cap	Outer tubing 1: silicone tubing with metal ring, 1/8"*1/4", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/8"*1/4", 10 cm, hydrophobic filter Inner tubing: silicone tubing, 1/8"*1/4", bottoming
BIOGBTA20ML009	BIOGBTB20ML009	20 ml	36*36*80		
BIOGBTA50ML009	BIOGBTB50ML009	50 ml	45*45*85		
BIOGBTA125ML009	BIOGBTB125ML009	125 ml	54*54*120	38 mm 2-port cap	Outer tubing 1: silicone tubing with metal ring, 1/4"*7/16", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/4"*7/16", 10 cm, hydrophobic filter Inner tubing: silicone tubing, 1/8"*1/4", bottoming
BIOGBTA250ML009	BIOGBTB250ML009	250 ml	68*68*140		
BIOGBTA500ML009	BIOGBTB500ML009	500 ml	74*74*190		
BIOGBTA1L009	BIOGBTB1L009	1 L	98*98*220	48 mm 2-port cap	Outer tubing 1: silicone tubing with metal ring, 1/4"*7/16", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/4"*7/16", 10 cm, hydrophobic filter Inner tubing: silicone tubing, 1/4"*7/16", bottoming
BIOGBTA2L009	BIOGBTB2L009	2 L	114*114*286		
BIOGBTA5L009	BIOGBTB5L009	5 L	180*180*332	80 mm 2-port cap	Outer tubing 1: silicone tubing with metal ring, 3/8"*5/8", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 3/8"*5/8", 15 cm, hydrophobic filter Inner tubing: silicone tubing, 1/4"*7/16", bottoming



Storage bottle with 3-port cap (with welded tubing)

Product code - sterile	Product code - non-sterile	Volume	Dimension L*W*H (mm)	Cap	Line
BIOGBTA5ML010	BIOGBTB5ML010	5 ml	36*36*60	20 mm 3-port cap	Outer tubings 1 & 2: thermoplastic tubing, 1/8"*1/4", 30 cm, plug Outer tubing 3: silicone tubing, 1/8"*1/4", 10 cm, hydrophobic filter Inner tubing: silicone tubing, 1/8"*1/4, bottoming
BIOGBTA20ML010	BIOGBTB20ML010	20 ml	36*36*80		
BIOGBTA50ML010	BIOGBTB50ML010	50 ml	45*45*85		
BIOGBTA125ML010	BIOGBTB125ML010	125 ml	54*54*120	38 mm 3-port cap	Outer tubings 1 & 2: thermoplastic tubing, 1/4"*7/16", 30 cm, plug Outer tubing 3: silicone tubing, 1/4"*7/16", 10 cm, hydrophobic filter Inner tubing: silicone tubing, 1/8"*1/4, bottoming
BIOGBTA250ML010	BIOGBTB250ML010	250 ml	68*68*140		
BIOGBTA500ML010	BIOGBTB500ML010	500 ml	74*74*190		
BIOGBTA1L010	BIOGBTB1L010	1 L	98*98*220	48 mm 3-port cap	Outer tubings 1 & 2: thermoplastic tubing, 1/4"*7/16", 30 cm, plug Outer tubing 3: silicone tubing, 1/4"*7/16", 10 cm, hydrophobic filter Inner tubing: silicone tubing, 1/4"*7/16", bottoming
BIOGBTA2L010	BIOGBTB2L010	2 L	114*114*286		
BIOGBTA5L010	BIOGBTB5L010	5 L	180*180*332	80 mm 3-port cap	Outer tubings 1 & 2: thermoplastic tubing, 3/8"*5/8", 30 cm, plug Outer tubing 3: silicone tubing, 3/8"*5/8", 15 cm, hydrophobic filter Inner tubing: silicone tubing, 1/4"*7/16", bottoming



Storage bottle with 3-port cap (with silicone tubing)

Product code - sterile	Product code - non-sterile	Volume	Dimension L*W*H (mm)	Cap	Line
BIOGBTA5ML011	BIOGBTB5ML011	5 ml	36*36*60	20 mm 3-port cap	Outer tubing 1: silicone tubing with metal ring, 1/8"*1/4", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/8"*1/4", 10 cm, hydrophobic filter Outer tubing 3: silicone tubing with metal ring, 1/8"*1/4", 30 cm, MPC-Male Inner tubing: silicone tubing, 1/8"*1/4", bottoming
BIOGBTA20ML011	BIOGBTB20ML011	20 ml	36*36*80		
BIOGBTA50ML011	BIOGBTB50ML011	50 ml	45*45*85		
BIOGBTA125ML011	BIOGBTB125ML011	125 ml	54*54*120	38 mm 3-port cap	Outer tubing 1: silicone tubing with metal ring, 1/4"*7/16", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/4"*7/16", 10 cm, hydrophobic filter Outer tubing 3: silicone tubing with metal ring, 1/4"*7/16", 30 cm, MPC-Male Inner tubing: silicone tubing, 1/8"*1/4", bottoming
BIOGBTA250ML011	BIOGBTB250ML011	250 ml	68*68*140		
BIOGBTA500ML011	BIOGBTB500ML011	500 ml	74*74*190		
BIOGBTA1L011	BIOGBTB1L011	1 L	98*98*220	48 mm 3-port cap	Outer tubing 1: silicone tubing with metal ring, 1/4"*7/16", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/4"*7/16", 10 cm, hydrophobic filter Outer tubing 3: silicone tubing with metal ring, 1/4"*7/16", 30 cm, MPC-Male Inner tubing: silicone tubing, 1/4"*7/16", bottoming
BIOGBTA2L011	BIOGBTB2L011	2 L	114*114*286		
BIOGBTA5L011	BIOGBTB5L011	5 L	180*180*332	80 mm 3-port cap	Outer tubing 1: silicone tubing with metal ring, 3/8*5/8", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 3/8*5/8", 15 cm, hydrophobic filter Outer tubing 3: silicone tubing with metal ring, 3/8*5/8", 30 cm, MPC-Male Inner tubing: silicone tubing, 1/4"*7/16", bottoming



Cap - no tubing



Product code - sterile	Product description	Line
BIOBGCAP200001	20 mm, regular	No port, no tubing
BIOBGCAP380001	38 mm, regular	
BIOBGCAP480001	48 mm, regular	
BIOBGCAP800001	80 mm, regular	
BIOBGCAP202001	20 mm, 2-port	2 ports, no tubing; 1/8" * 2, inner 1/8" * 2
BIOBGCAP382001	38 mm, 2-port	2 ports, no tubing; 1/4" x 2, inner 1/8" x 2
BIOBGCAP482001	48 mm, 2-port	2 ports, no tubing; 1/4" * 2, inner 1/4" * 2
BIOBGCAP802001	80 mm, 2-port	2 ports, no tubing; 1/4" * 2, inner 1/4" * 2
BIOBGCAP203001	20 mm, 3-port	3 ports, no tubing; 1/8" * 3, inner 1/8" * 2
BIOBGCAP383001	38 mm, 3-port	3 ports, no tubing; 1/4" * 3, inner 1/8" * 2
BIOBGCAP483001	48 mm, 3-port	3 ports, no tubing; 1/4" * 3, inner 1/4" * 2
BIOBGCAP803001	80 mm, 3-port	3 ports, no tubing; 1/4" * 3, inner 1/4" * 2

Product code - non-sterile	Product Description	Line
BIOBGCBP200001	20 mm, regular	No port, no tubing
BIOBGCBP380001	38 mm, regular	
BIOBGCBP480001	48 mm, regular	
BIOBGCBP800001	80 mm, regular	
BIOBGCBP202001	20 mm, 2-port	2 ports, no tubing; 1/8" * 2, inner 1/8" * 2
BIOBGCBP382001	38 mm, 2-port	2 ports, no tubing; 1/4" x 2, inner 1/8" x 2
BIOBGCBP482001	48 mm, 2-port	2 ports, no tubing; 1/4" * 2, inner 1/4" * 2
BIOBGCBP802001	80 mm, 2-port	2 ports, no tubing; 1/4" * 2, inner 1/4" * 2
BIOBGCBP203001	20 mm, 3-port	3 ports, no tubing; 1/8" * 3, inner 1/8" * 2
BIOBGCBP383001	38 mm, 3-port	3 ports, no tubing; 1/4" * 3, inner 1/8" * 2
BIOBGCBP483001	48 mm, 3-port	3 ports, no tubing; 1/4" * 3, inner 1/4" * 2
BIOBGCBP803001	80 mm, 3-port	3 ports, no tubing; 1/4" * 3, inner 1/4" * 2

Cap - with silicone tubing

Product code - sterile	Product code - non-sterile	Product Description	Line
BIOBGCAP202002	BIOBGCBP202002	20 mm, 2-port	Outer tubing 1: silicone tubing with metal ring, 1/8" x 1/4", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/8" x 1/4", 10 cm, hydrophobic filter Inner tubing: silicone tubing, 1/8" x 1/4", bottoming
BIOBGCAP382002	BIOBGCBP382002	38 mm, 2-port	Outer tubing 1: silicone tubing with metal ring, 1/4" x 7/16", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/4" x 7/16", 10 cm, hydrophobic filter Inner tubing: silicone tubing, 1/8" x 1/4", bottoming
BIOBGCAP482002	BIOBGCBP482002	48 mm, 2-port	Outer tubing 1: silicone tubing with metal ring, 1/4" x 7/16", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/4" x 7/16", 10 cm, hydrophobic filter Inner tubing: silicone tubing, 1/4" x 7/16", bottoming
BIOBGCAP802002	BIOBGCBP802002	80 mm, 2-port	Outer tubing 1: silicone tubing with metal ring, 1/4" x 7/16", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/4" x 7/16", 10 cm, hydrophobic filter Inner tubing: silicone tubing, 1/4" x 7/16", bottoming
BIOBGCAP203002	BIOBGCBP203002	20 mm, 3-port	Outer tubing 1: silicone tubing with metal ring, 1/8" x 1/4", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/8" x 1/4", 10 cm, hydrophobic filter Outer tubing 3: silicone tubing with metal ring, 1/8" x 1/4", 30 cm, MPC-Male Inner tubing: silicone tubing, 1/8" x 1/4", bottoming
BIOBGCAP383002	BIOBGCBP383002	38 mm, 3-port	Outer tubing 1: silicone tubing with metal ring, 1/4" x 7/16", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/4" x 7/16", 10 cm, hydrophobic filter Outer tubing 3: silicone tubing with metal ring, 1/4" x 7/16", 30 cm, MPC-Male Inner tubing: silicone tubing, 1/8" x 1/4", bottoming
BIOBGCAP483002	BIOBGCBP483002	48 mm, 3-port	Outer tubing 1: silicone tubing with metal ring, 1/4" x 7/16", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/4" x 7/16", 10 cm, hydrophobic filter Outer tubing 3: silicone tubing with metal ring, 1/4" x 7/16", 30 cm, MPC-Male Inner tubing: silicone tubing, 1/4" x 7/16", bottoming
BIOBGCAP803002	BIOBGCBP803002	80 mm, 3-port	Outer tubing 1: silicone tubing with metal ring, 1/4" x 7/16", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/4" x 7/16", 10 cm, hydrophobic filter Outer tubing 3: silicone tubing with metal ring, 1/4" x 7/16", 30 cm, MPC-Male Inner tubing: silicone tubing, 1/4" x 7/16", bottoming



Cap - with welder tubing

Product code - sterile	Product code - non-sterile	Product Description	Line
BIOBGCAP202003	BIOBGCBP202003	20 mm, 2-port	Outer tubing 1: thermoplastic tubing, 1/8"*1/4", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/8"*1/4", 10 cm, hydrophobic filter Inner tubing: silicone tubing, 1/8"*1/4", bottoming
BIOBGCAP382003	BIOBGCBP382003	38 mm, 2-port	Outer tubing 1: thermoplastic tubing, 1/4"*7/16", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/4"*7/16", 10 cm, hydrophobic filter Inner tubing: silicone tubing, 1/8"*1/4", bottoming
BIOBGCAP482003	BIOBGCBP482003	48 mm, 2-port	Outer tubing 1: thermoplastic tubing, 1/4"*7/16", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/4"*7/16", 10 cm, hydrophobic filter Inner tubing: silicone tubing, 1/4"*7/16", bottoming
BIOBGCAP802003	BIOBGCBP802003	80 mm, 2-port	Outer tubing 1: thermoplastic tubing, 1/4"*7/16", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/4"*7/16", 10 cm, hydrophobic filter Inner tubing: silicone tubing, 1/4"*7/16", bottoming
BIOBGCAP203003	BIOBGCBP20-3-003	20 mm, 3-port	Outer tubings 1 & 2: C-Flex tubing, 1/8"*1/4", 30 cm, plug Outer tubing 3: silicone tubing, 1/8"*1/4", 10 cm, hydrophobic filter Inner tubing: silicone tubing, 1/8"*1/4", bottoming
BIOBGCAP383003	BIOBGCBP383003	38 mm, 3-port	Outer tubing 1: thermoplastic tubing, 1/4"*7/16", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/4"*7/16", 10 cm, hydrophobic filter Outer tubing 3: thermoplastic tubing, 1/4"*7/16", 30 cm, MPC-Male Inner tubing: silicone tubing, 1/8"*1/4", bottoming
BIOBGCAP483003	BIOBGCBP483003	48 mm, 3-port	Outer tubing 1: thermoplastic tubing, 1/4"*7/16", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/4"*7/16", 10 cm, hydrophobic filter Outer tubing 3: thermoplastic tubing, 1/4"*7/16", 30 cm, MPC-Male Inner tubing: silicone tubing, 1/4"*7/16", bottoming
BIOBGCAP803003	BIOBGCBP803003	80 mm, 3-port	Outer tubing 1: thermoplastic tubing, 1/4"*7/16", 30 cm, MPC-Female Outer tubing 2: silicone tubing, 1/4"*7/16", 10 cm, hydrophobic filter Outer tubing 3: thermoplastic tubing, 1/4"*7/16", 30 cm, MPC-Male Inner tubing: silicone tubing, 1/4"*7/16", bottoming



2D Storage Solution

2D Storage Bag

2D Storage bags are made of multi-layer co-extrusion films. The ship-typed integrated welded outlet helps to minimize residual liquid. The outlet is available in 1/8", 1/4" and 3/8" and can be connected to silicone and thermoplastic tubing. The combination of GVS 2D storage bags with single-use tubings can meet the requirements of different processes and liquids.

Features

- Volume range: 5 mL–50 L
- Wide applications: for collection of purified components, bulk solution storage, intermediate product storage, medium storage, etc.
- Highly customizable, and configurable with a variety of connectors, hoses, and functional units



2D Storage bags

Ordering information

[illegible]

[illegible]

3D Storage Solution

Circular Storage Bag

Made of multi-layer co-extrusion films, the sterile circular storage bags are guaranteed very low gas and steam permeability, excellent chemical compatibility and biocompatibility, and good heat seal strength. This ensures their safety in the storage and transportation of feed liquids in various biopharmaceutical processes. The standard circular storage bags are available in various types and specifications (50–500 L). With GVS single-use tubings, the product can meet the requirements of different processes and different liquids.

Product code	Matching type	Line 1	Line 2	Line 3	Film
BIOGGBBPR0050S003	Circular plastic bin 50L	100 cm ID3/8"OD5/8" thermoplastic tubing + plug	100 cm ID3/8"OD5/8" thermoplastic tubing + plug	30 cm ID1/4"OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOGGBBPR0050S004	Circular plastic bin 50L	100 cm ID3/8"OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOGGBBPR0050S005	Circular plastic bin 50L	100 cm ID3/8"OD5/8" thermoplastic tubing + plug	100 cm ID3/8"OD5/8" thermoplastic tubing + plug	30 cm ID1/4"OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOGGBBPR0050S006	Circular plastic bin 50L	100 cm ID3/8"OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOGGBBPR0100S003	Circular plastic bin 100L	100 cm ID3/8"OD5/8" thermoplastic tubing + plug	100 cm ID3/8"OD5/8" thermoplastic tubing + plug	30 cm ID1/4"OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOGGBBPR0100S004	Circular plastic bin 100L	100 cm ID3/8"OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOGGBBPR0100S005	Circular plastic bin 100L	100 cm ID3/8"OD5/8" thermoplastic tubing + plug	100 cm ID3/8"OD5/8" thermoplastic tubing + plug	30 cm ID1/4"OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOGGBBPR0100S006	Circular plastic bin 100L	100 cm ID3/8"OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOGGBBPR0200S003	Circular plastic bin 200L	100 cm ID3/8"OD5/8" thermoplastic tubing + plug	100 cm ID3/8"OD5/8" thermoplastic tubing + plug	30 cm ID1/4"OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOGGBBPR0200S004	Circular plastic bin 200L	100 cm ID3/8"OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOGGBBPR0200S005	Circular plastic bin 200L	100 cm ID3/8"OD5/8" thermoplastic tubing + plug	100 cm ID3/8"OD5/8" thermoplastic tubing + plug	30 cm ID1/4"OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOGGBBPR0200S006	Circular plastic bin 200L	100 cm ID3/8"OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOGGBBPR0300S003	Circular plastic bin 300L	100 cm ID1/2"OD3/4" platinum cured silicone tubing + female MPX	100 cm ID1/2"OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOGGBBPR0300S004	Circular plastic bin 300L	100 cm ID1/2"OD3/4" thermoplastic tubing + plug	100 cm ID1/2"OD3/4" thermoplastic tubing + plug	30 cm ID1/4"OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOGGBBPR0300S005	Circular plastic bin 300L	100 cm ID1/2"OD3/4" platinum cured silicone tubing + female MPX	100 cm ID1/2"OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOGGBBPR0300S006	Circular plastic bin 300L	100 cm ID1/2"OD3/4" thermoplastic tubing + plug	100 cm ID1/2"OD3/4" thermoplastic tubing + plug	30 cm ID1/4"OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOGGBBPR0500S003	Circular plastic bin 500L	100 cm ID1/2"OD3/4" platinum cured silicone tubing + female MPX	100 cm ID1/2"OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOGGBBPR0500S004	Circular plastic bin 500L	100 cm ID1/2"OD3/4" thermoplastic tubing + plug	100 cm ID1/2"OD3/4" thermoplastic tubing + plug	30 cm ID1/4"OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOGGBBPR0500S005	Circular plastic bin 500L	100 cm ID1/2"OD3/4" platinum cured silicone tubing + female MPX	100 cm ID1/2"OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4"OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOGGBBPR0500S006	Circular plastic bin 500L	100 cm ID1/2"OD3/4" thermoplastic tubing + plug	100 cm ID1/2"OD3/4" thermoplastic tubing + plug	30 cm ID1/4"OD7/16" thermoplastic tubing + needleless sampling	Domestic

Cubic Storage Bag: Matching Cubic Plastic Bin

Made of multi-layer co-extrusion films, the sterile cubic storage bags are guaranteed very low gas and steam permeability, excellent chemical compatibility and biocompatibility, and good heat seal strength. This ensures their safety in the storage and transportation of feed liquids in various biopharmaceutical processes. The standard cubic storage bags are available in various types and specifications (50–1000 L). With GVS single-use tubings, the product can meet the requirements of different processes and different liquids.

Ordering information

Product code	Matching type	Line 1	Line 2	Line 3	Film
BIOGBBPC0100S003	cubic collapsible plastic bin 250 L	100 cm ID3/8"OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOGBBPC0100S004	cubic collapsible plastic bin 250 L	100 cm ID3/8"OD5/8" thermoplastic tubing + plug	100 cm ID3/8"OD5/8" thermoplastic tubing + plug	30 cm ID1/4"OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOGBBPC0100S005	cubic collapsible plastic bin 250 L	100 cm ID3/8"OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOGBBPC0100S006	cubic collapsible plastic bin 250 L	100 cm ID3/8"OD5/8" thermoplastic tubing + plug	100 cm ID3/8"OD5/8" thermoplastic tubing + plug	30 cm ID1/4"OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOGBBPC0250S003	cubic collapsible plastic bin 250 L	100 cm ID3/8"OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOGBBPC0250S004	cubic collapsible plastic bin 250 L	100 cm ID3/8"OD5/8" thermoplastic tubing + plug	100 cm ID3/8"OD5/8" thermoplastic tubing + plug	30 cm ID1/4"OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOGBBPC0250S005	cubic collapsible plastic bin 250 L	100 cm ID3/8"OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOGBBPC0250S006	cubic collapsible plastic bin 250 L	100 cm ID3/8"OD5/8" thermoplastic tubing + plug	100 cm ID3/8"OD5/8" thermoplastic tubing + plug	30 cm ID1/4"OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOGBBPC1000S003	cubic collapsible plastic bin 1000 L	100 cm ID3/4"OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOGBBPC1000S005	cubic collapsible plastic bin 1000 L	100 cm ID3/4"OD1" platinum cured silicone tubing + TC50	100 cm ID3/4"OD1" platinum cured silicone tubing + TC50	30 cm ID1/4"OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOGBBCPC0050S003	C series cubic plastic tank 50 L	100 cm ID3/8"OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOGBBCPC0050S007	C series cubic plastic tank 50 L	100 cm ID3/8"OD5/8" thermoplastic tubing + plug	100 cm ID3/8"OD5/8" thermoplastic tubing + plug	30 cm ID1/4"OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOGBBCPC0050S005	C series cubic plastic tank 50 L	100 cm ID3/8"OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOGBBCPC0050S008	C series cubic plastic tank 50 L	100 cm ID3/8"OD5/8" thermoplastic tubing + plug	100 cm ID3/8"OD5/8" thermoplastic tubing + plug	30 cm ID1/4"OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOGBBCPC0100S003	C series cubic plastic tank 100 L	100 cm ID3/8"OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOGBBCPC0100S007	C series cubic plastic tank 100 L	100 cm ID3/8"OD5/8" thermoplastic tubing + plug	100 cm ID3/8"OD5/8" thermoplastic tubing + plug	30 cm ID1/4"OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOGBBCPC-0100-S005	C series cubic plastic tank 100 L	100 cm ID3/8"OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOGBBCPC0100S008	C series cubic plastic tank 100 L	100 cm ID3/8"OD5/8" thermoplastic tubing + plug	100 cm ID3/8"OD5/8" thermoplastic tubing + plug	30 cm ID1/4"OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOGBBCPC0200S003	C series cubic plastic tank 200 L	100 cm ID3/8"OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOGBBCPC0200S007	C series cubic plastic tank 200 L	100 cm ID3/8"OD5/8" thermoplastic tubing + plug	100 cm ID3/8"OD5/8" thermoplastic tubing + plug	30 cm ID1/4"OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOGBBCPC0200S005	C series cubic plastic tank 200 L	100 cm ID3/8"OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8"OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4"OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOGBBCPC0200S008	C series cubic plastic tank 200 L	100 cm ID3/8"OD5/8" thermoplastic tubing + plug	100 cm ID3/8"OD5/8" thermoplastic tubing + plug	30 cm ID1/4"OD7/16" thermoplastic tubing + needleless sampling	Domestic

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Product code	Matching type	Line 1	Line 2	Line 3	Film
BIOGBSPC0100S003	S series cubic plastic tank 100 L	100 cm ID3/8**OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8**OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4**OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOGBSPC0100S007	S series cubic plastic tank 100 L	100 cm ID3/8**OD5/8" thermoplastic tubing + plug	100 cm ID3/8**OD5/8" thermoplastic tubing + plug	30 cm ID1/4**OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOGBSPC0100S005	S series cubic plastic tank 100 L	100 cm ID3/8**OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8**OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4**OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOGBSPC0100S008	S series cubic plastic tank 100 L	100 cm ID3/8**OD5/8" thermoplastic tubing + plug	100 cm ID3/8**OD5/8" thermoplastic tubing + plug	30 cm ID1/4**OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOGBSPC0200S003	S series cubic plastic tank 200 L	100 cm ID3/8**OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8**OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4**OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOGBSPC0200S007	S series cubic plastic tank 200 L	100 cm ID3/8**OD5/8" thermoplastic tubing + plug	100 cm ID3/8**OD5/8" thermoplastic tubing + plug	30 cm ID1/4**OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOGBSPC0200S005	S series cubic plastic tank 200 L	100 cm ID3/8**OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8**OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4**OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOGBSPC0200-008	S series cubic plastic tank 200 L	100 cm ID3/8**OD5/8" thermoplastic tubing + plug	100 cm ID3/8**OD5/8" thermoplastic tubing + plug	30 cm ID1/4**OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOGBSPC0500S003	S series cubic plastic tank 500 L	100 cm ID1/2**OD3/4" platinum cured silicone tubing + female MPX	100 cm ID1/2**OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4**OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOGBSPC0500S007	S series cubic plastic tank 500 L	100 cm ID1/2**OD3/4" thermoplastic tubing + plug	100 cm ID1/2**OD3/4" thermoplastic tubing + plug	30 cm ID1/4**OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOGBSPC0500S005	S series cubic plastic tank 500 L	100 cm ID1/2**OD3/4" platinum cured silicone tubing + female MPX	100 cm ID1/2**OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4**OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOGBSPC0500S008	S series cubic plastic tank 500 L	100 cm ID1/2**OD3/4" thermoplastic tubing + plug	100 cm ID1/2**OD3/4" thermoplastic tubing + plug	30 cm ID1/4**OD7/16" thermoplastic tubing + needleless sampling	Domestic



Cubic Storage Bag: Matching Cubic Stainless Steel Tank

Made of multi-layer co-extrusion films, the sterile cubic storage bags are guaranteed very low gas and steam permeability, excellent chemical compatibility and biocompatibility, and good heat seal strength. This ensures their safety in the storage and transportation of feed liquids in various biopharmaceutical processes. The standard cubic storage bags are available in various types and specifications (50–1000 L). With GVS single-use tubings, the product can meet the requirements of different processes and different liquids.

Ordering information

Product code	Matching type	Line 1	Line 2	Line 3	Film
BIOGBBSC0100S003	cubic stainless steel tank 100 L	100 cm ID3/8**OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8**OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4**OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOGBBSC0100S004	cubic stainless steel tank 100 L	100 cm ID3/8**OD5/8" thermoplastic tubing + plug	100 cm ID3/8**OD5/8" thermoplastic tubing + plug	30 cm ID1/4**OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOGBBSC0100S005	cubic stainless steel tank 100 L	100 cm ID3/8**OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8**OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4**OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOGBBSC0100S006	cubic stainless steel tank 100 L	100 cm ID3/8**OD5/8" thermoplastic tubing + plug	100 cm ID3/8**OD5/8" thermoplastic tubing + plug	30 cm ID1/4**OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOGBBSC0200S003	cubic stainless steel tank 200 L	100 cm ID3/8**OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8**OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4**OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOGBBSC0200S004	cubic stainless steel tank 200 L	100 cm ID3/8**OD5/8" thermoplastic tubing + plug	100 cm ID3/8**OD5/8" thermoplastic tubing + plug	30 cm ID1/4**OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOGBBSC0200S005	cubic stainless steel tank 200 L	100 cm ID3/8**OD5/8" platinum cured silicone tubing + female MPC	100 cm ID3/8**OD5/8" platinum cured silicone tubing + male MPC	30 cm ID1/4**OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOGBBSC0200S006	cubic stainless steel tank 200 L	100 cm ID3/8**OD5/8" thermoplastic tubing + plug	100 cm ID3/8**OD5/8" thermoplastic tubing + plug	30 cm ID1/4**OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOGBBSC0500S003	cubic stainless steel tank 500 L	100 cm ID1/2**OD3/4" platinum cured silicone tubing + female MPX	100 cm ID1/2**OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4**OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOGBBSC0500S004	cubic stainless steel tank 500 L	100 cm ID1/2**OD3/4" thermoplastic tubing + plug	100 cm ID1/2**OD3/4" thermoplastic tubing + plug	30 cm ID1/4**OD7/16" thermoplastic tubing + needleless sampling	Imported
BIOGBBSC0500S005	cubic stainless steel tank 500 L	100 cm ID1/2**OD3/4" platinum cured silicone tubing + female MPX	100 cm ID1/2**OD3/4" platinum cured silicone tubing + male MPX	30 cm ID1/4**OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOGBBSC0500S006	cubic stainless steel tank 500 L	100 cm ID1/2**OD3/4" thermoplastic tubing + plug	100 cm ID1/2**OD3/4" thermoplastic tubing + plug	30 cm ID1/4**OD7/16" thermoplastic tubing + needleless sampling	Domestic
BIOGBBSC1000S003	cubic stainless steel tank 1000 L	100 cm ID3/4**OD1" platinum cured silicone tubing + TC50	100 cm ID3/4**OD1" platinum cured silicone tubing + TC50	30 cm ID1/4**OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOGBBSC1000S005	cubic stainless steel tank 1000 L	100 cm ID3/4**OD1" platinum cured silicone tubing + TC50	100 cm ID3/4**OD1" platinum cured silicone tubing + TC50	30 cm ID1/4**OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOGBBSC2000S003	cubic stainless steel tank 2000 L	100 cm ID3/4**OD1" platinum cured silicone tubing + TC50	100 cm ID3/4**OD1" platinum cured silicone tubing + TC50	30 cm ID1/4**OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOGBBSC2000S005	cubic stainless steel tank 2000 L	100 cm ID3/4**OD1" platinum cured silicone tubing + TC50	100 cm ID3/4**OD1" platinum cured silicone tubing + TC50	30 cm ID1/4**OD7/16" platinum cured silicone tubing + needleless sampling	Domestic
BIOGBBSC3000S003	cubic stainless steel tank 1000 L	100 cm ID3/4**OD1" platinum cured silicone tubing + TC50	100 cm ID3/4**OD1" platinum cured silicone tubing + TC50	30 cm ID1/4**OD7/16" platinum cured silicone tubing + needleless sampling	Imported
BIOGBBSC3000S005	cubic stainless steel tank 1000 L	100 cm ID3/4**OD1" platinum cured silicone tubing + TC50	100 cm ID3/4**OD1" platinum cured silicone tubing + TC50	30 cm ID1/4**OD7/16" platinum cured silicone tubing + needleless sampling	Domestic

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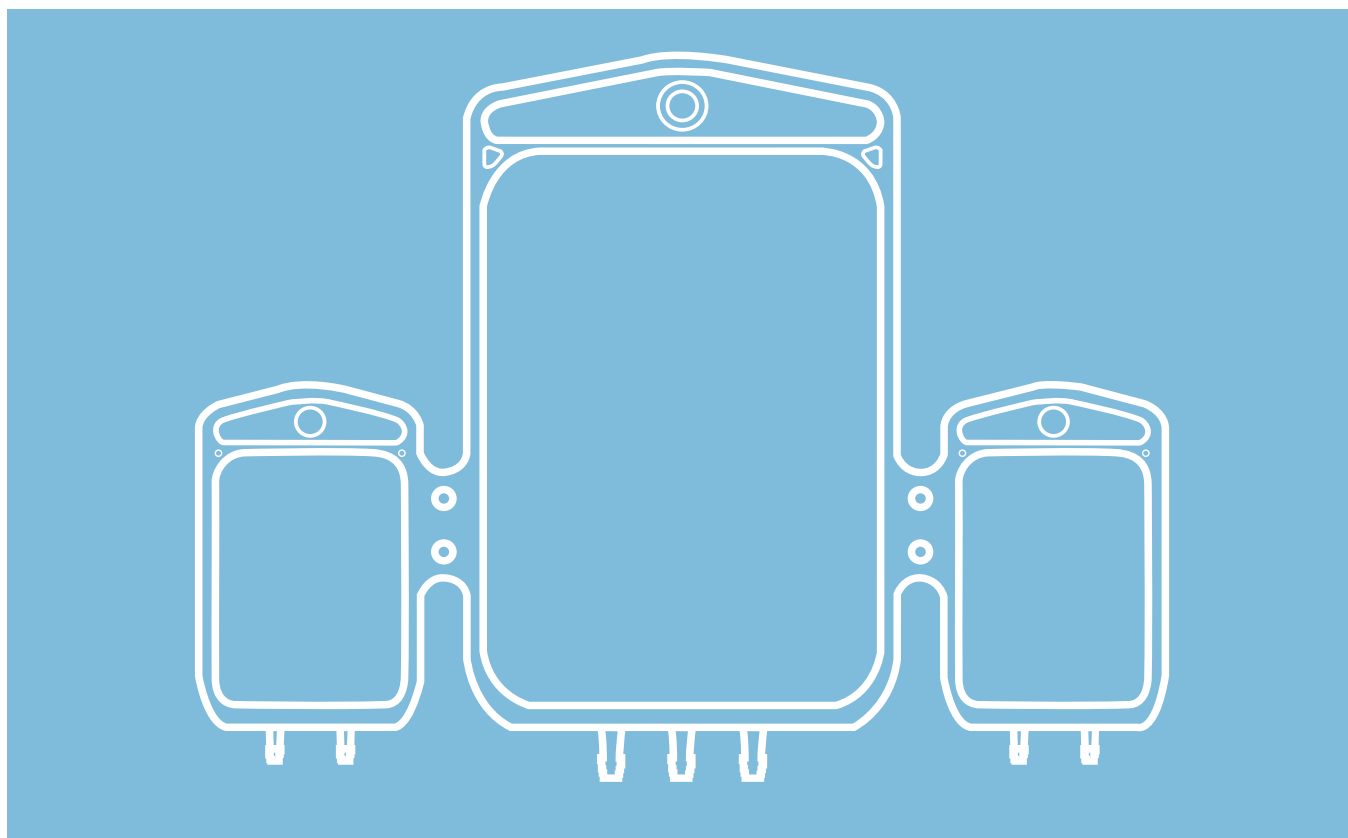
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RNase-free Disposable Consumables

mRNA is a new-generation technology platform that is expected to change traditional ways of vaccines and monoclonal anti-body development and manufacturing. Due to its short R&D cycle, simple production process, strong immunogenicity, and high safety, mRNA has the potential to be widely applied in various fields such as vaccines for infectious diseases, tumor immunology, and recombinant protein. Even though mRNA vaccines are booming, the mRNA drugs are in low profile. To date, there is no particularly welcomed mRNA drug, mainly due to the difficulty of mRNA drug development - the higher the purity, the stronger the druggability.

However, due to ubiquitous RNase in the environment, mRNA is easily contaminated, which is why Moderna has invested heavily in building a nuclease-free laboratory (RNase-free Lab). The construction costs are as high as tens of millions of dollars; and with subsequent operations and maintenance, the cost requires an investment of hundreds of millions of dollars. This is possibly why the development of many mRNA drugs is stalled.

Ribonuclease (RNase) is a class of nucleic acid hydrolases that are widely found in animals and plants. Due to its “ubiquitous” nature, it is necessary to take multiple and complex clean-ups to eliminate the effects of RNase in the mRNA production process, which greatly reduces production efficiency. Meanwhile, the process validation and verification of RNase removal are also time-consuming and labor-intensive. Therefore, RNase-free disposable consumables are highly welcomed by mRNA manufacturers using single-use bioprocess technology for production. In addition, the RNase level within those consumables shall be inspected before release and can be verified post-use without damage.



As a supplier of bioprocess disposable equipment and consumables for bioprocessing, GVS has launched an innovative design and comprehensive solution of master bag + double satellite bags for the first time with 100% RNase/ DNase inspection and release of products as well as customer verification.



Features

- Innovative design of master bag + double satellite bags (enabling 100% individual inspection of RNase-/DNase-free bags)
- Identical material/production environment of the master bag and satellite bag
- Satellite bag-1 (QC release): for RNase inspection prior to product release
- Satellite bag-2 (customer verification): for customer verification test before/after use
- Different sizes/models of bioprocess disposable products (Storage bags + Bioreactor bags + Cell bags, etc.)
- High-standard production environment control and monthly RNase monitoring

Nuclease-free Single-Use Consumables		
Single-use storage bottle	Batch inspection	DNase-free/ RNase-free/ Nuclease-free (DNase-free & RNase-free)
Single-use 2D storage bag	Individual/hybrid/batch inspection	
Single-use 3D storage bag	Individual/hybrid/batch inspection	
Single-use mixing bag	Individual/hybrid/batch inspection	
Single-use cell bag/mixing bag	Individual/hybrid/batch inspection	
Single-use bioreactor bag	Individual/hybrid/batch inspection	



Ordering information

DNase-free product code	RNase-free product code	Nuclease-free product code	Volume	Product name	Matching type	Package
BIOGBTA5ML001D	BIOGBTA5ML001R	BIOGBTA5ML001N	5 ml	5 ml single-use storage bottle	Regular cap	200
BIOGBTA20ML001D	BIOGBTA20ML001R	BIOGBTA20ML001N	20 ml	20 ml single-use storage bottle		200
BIOGBTA50ML001D	BTA50ML001R	BIOGBTA50ML001N	50 ml	50 ml single-use storage bottle		120
BIOGBTA125ML001D	BTA125ML001R	BIOGBTA125ML001N	125 ml	125 ml single-use storage bottle		60
BIOGBTA250ML001D	BTA250ML001R	BIOGBTA250ML001N	250 ml	250 ml single-use storage bottle		40
BIOGBTA500ML001D	BTA500ML001R	BIOGBTA500ML001N	500 ml	500 ml single-use storage bottle		20
BIOGBTA1L001D	BIOGBTA1L001R	BIOGBTA1L001N	1L	1 L single-use storage bottle		25
BIOGBTA2L001D	BIOGBTA2L001R	BIOGBTA2L001N	2L	2 L single-use storage bottle		16
BIOGBTA5ML002D	BIOGBTA5ML002R	BIOGBTA5ML002N	5 ml	5 ml single-use storage bottle	2-port cap	200
BIOGBTA20ML002D	BIOGBTA20ML002R	BIOGBTA20ML002N	20 ml	20 ml single-use storage bottle		200
BIOGBTA50ML002D	BIOGBTA50ML002R	BIOGBTA50ML002N	50 ml	50 ml single-use storage bottle		120
BIOGBTA125ML002D	BIOGBTA125ML002R	BIOGBTA125ML002N	125 ml	125 ml single-use storage bottle		60
BIOGBTA250ML002D	BIOGBTA250ML002R	BIOGBTA250ML002N	250 ml	250 ml single-use storage bottle		40
BIOGBTA500ML002D	BIOGBTA500ML002R	BIOGBTA500ML002N	500 ml	500 ml single-use storage bottle		20
BIOGBTA1L002D	BIOGBTA1L002R	BIOGBTA1L002N	1 L	1 L single-use storage bottle		25
BIOGBTA2L002D	BIOGBTA2L002R	BIOGBTA2L002N	2 L	2 L single-use storage bottle		16
BIOGBTA5ML003D	BIOGBTA5ML003R	BIOGBTA5ML003N	5 ml	5 ml single-use storage bottle	3-port cap	200
BIOGBTA20ML003D	BIOGBTA20ML003R	BIOGBTA20ML003N	20 ml	20 ml single-use storage bottle		200
BIOGBTA50ML003D	BIOGBTA50ML003R	BIOGBTA50ML003N	50 ml	50 ml single-use storage bottle		120
BIOGBTA125ML003D	BIOGBTA125ML003R	BIOGBTA125ML003N	125 ml	125 ml single-use storage bottle		60
BIOGBTA250ML003D	BIOGBTA250ML003R	BIOGBTA250ML003N	250 ml	250 ml single-use storage bottle		40
BIOGBTA500ML003D	BIOGBTA500ML003R	BIOGBTA500ML003N	500 ml	500 ml single-use storage bottle		20
BIOGBTA1L003D	BIOGBTA1L003R	BIOGBTA1L003N	1 L	1 L single-use storage bottle		25
BIOGBTA2L003D	BIOGBTA2L003R	BIOGBTA2L003N	2 L	2 L single-use storage bottle		16

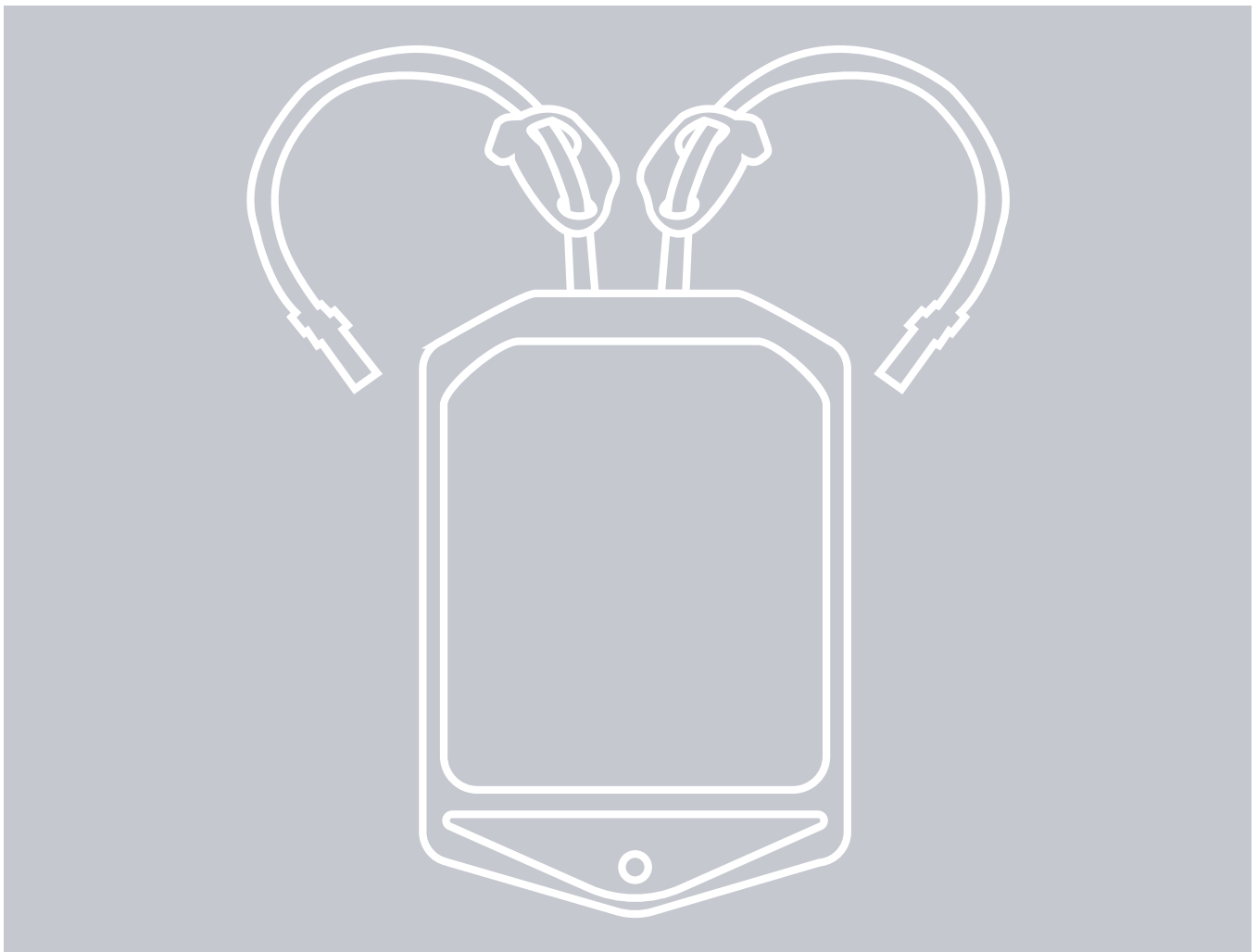
DNase-free product code	RNase-free product code	Nuclease-free product code	Volume	Line
BIOGBD0001S003	BIOGBR0001S003	BIOGBN0001S003	1 L	50 ml satellite bag 20 cm ID1/8" * OD1/4" platinum cured silicone tubing + female Luer
				30 cm ID1/4" * OD7/16" Platinum 50 platinum cured silicone tubing + AseptiQuik® G connector
BIOGBD0002S003	BIOGBR0002S003	BIOGBN0002S003	2 L	30 cm ID1/4" * OD7/16" Platinum 50 platinum cured silicone tubing + AseptiQuik® G connector 20 cm ID1/4" * OD7/16" C-Flex thermoplastic tubing + needleless sampling
BIOGBD0005S003	BIOGBR0005S003	BIOGBN0005S003	5 L	
BIOGBD0010S003	BIOGBR0010S003	BIOGBN0010S003	10 L	50 ml satellite bag 20 cm ID1/8" * OD1/4" platinum cured silicone tubing + female Luer
				30 cm ID3/8" * OD5/8" Platinum 50 platinum cured silicone tubing + AseptiQuik® G connector
BIOGBD0020S003	BIOGBR0020S003	BIOGBN0020S003	20 L	30 cm ID3/8" * OD5/8" Platinum 50 platinum cured silicone tubing + AseptiQuik® G connector 20 cm ID1/4" * OD7/16" C-Flex thermoplastic tubing + needleless sampling
BIOGBD0050S003	BIOGBR0050S003	BIOGBN0050S003	50 L	
BIOGBD0001S004	BIOGBR0001S004	BIOGBN0001S004	1 L	50 ml satellite bag 10 cm ID1/8" * OD1/4" platinum cured silicone tubing + 10 cm ID1/8" * OD1/4" C-Flex thermoplastic tubing + female Luer
				30 cm ID1/4" * OD7/16" Platinum 50 platinum cured silicone tubing + female MPC
BIOGBD0002S004	BIOGBR0002S004	BIOGBN0002S004	2 L	30 cm ID1/4" * OD7/16" C-Flex thermoplastic tubing + male MPC 20 cm ID1/4" * OD7/16" C-Flex thermoplastic tubing + plug
BIOGBD0005S004	BIOGBR0005S004	BIOGBN0005S004	5 L	
BIOGBD0010S004	BIOGBR0010S004	BIOGBN0010S004	10 L	50 ml satellite bag 10 cm ID1/8" * OD1/4" platinum cured silicone tubing + 10 cm ID1/8" * OD1/4" C-Flex thermoplastic tubing + female Luer
				30 cm ID3/8" * OD5/8" Platinum 50 platinum cured silicone tubing + female MPC
BIOGBD0020S004	BIOGBR0020S004	BIOGBN0020S004	20 L	30 cm ID3/8" * OD5/8" C-Flex thermoplastic tubing + female MPC 20 cm ID1/4" * OD7/16" C-Flex thermoplastic tubing + plug
BIOGBD0050S004	BIOGBR0050S004	BIOGBN0050S004	50 L	

DNase-free product code	RNase-free product code	Nuclease-free product code	Volume	Line
BIOGGBD0001S005	BIOGGBR0001S005	BIOGGBN0001S005	1 L	50 ml satellite bag 10 cm ID1/8" * OD1/4" platinum cured silicone tubing + 10 cm ID1/8" * OD1/4" C-Flex thermoplastic tubing + female Luer 30 cm ID1/4" * OD7/16" Platinum 50 platinum cured silicone tubing + TC25 quick connector 30 cm ID1/4" * OD7/16" C-Flex thermoplastic tubing + TC25 quick connector 20 cm ID1/4" * OD7/16" C-Flex thermoplastic tubing + needleless sampling
BIOGGBD0002S005	BIOGGBR0002S005	BIOGGBN0002S005	2 L	
BIOGGBD0005S005	BIOGGBR0005S005	BIOGGBN0005S005	5 L	
BIOGGBD0010S005	BIOGGBR0010S005	BIOGGBN0010S005	10 L	50 ml satellite bag 10 cm ID1/8" * OD1/4" platinum cured silicone tubing + 10 cm ID1/8" * OD1/4" C-Flex thermoplastic tubing + female Luer 30 cm ID3/8" * OD5/8" Platinum 50 platinum cured silicone tubing + TC25 quick connector 30 cm ID3/8" * OD5/8" C-Flex thermoplastic tubing + TC25 quick connector 20 cm ID1/4" * OD7/16" C-Flex thermoplastic tubing + needleless sampling
BIOGGBD0020S005	BIOGGBR0020S005	BIOGGBN0020S005	20 L	
BIOGGBD0050S005	BIOGGBR0050S005	BIOGGBN0050S005	50 L	

Sterile Sampling System

Product sampling is necessary and critical for cell culture and other operations in biopharmaceutical processes. Samples collected through Sampling Bags can be used to determine critical purity attributes, such as sterility, endotoxin levels, bioburden, and important cell culture parameters including metabolites, nutrient levels, pH, and osmolarity.

Sterile Sampling Systems provides a pre-assembled sampling solution. It is specially designed for sampling operations at various stages of biopharmaceutical processes such as in-process monitoring of buffer storage, medium preparation, product collection and analysis. To mitigate the risk of residual contamination and ensure the safety of bio-process, the product is sterilized by irradiation prior to delivery.



Features

- Types of sampling container: bags and bottles
- Volume range: sampling bag 50 mL to 1 L, sampling bottle 20 mL to 250 mL
- 2 mm needle, covers a variety of liquid sampling needs in the entire bio-process
- The material of the liquid contact layer of both the sampling bags (ULDPE) and sampling bottles (PC) complies with bio-pharmaceutical requirements
- High transparency and excellent compatibility
- Overmolded needles and tubings for assurance of airtightness and sterility
- Adequate validation documents to ensure safety in use
- Operating temperature range: sampling bag – 80 ° C to 60 ° C, sampling bottle – 80 ° C to 121 ° C
- Maximum operating pressure: single-needle, single-bag products: 0.5 bar; single-needle, 5-bag products: 0.3 bar
- Customization available

Validation Documents

- 100% integrity testing
- USP<665>, Extractable testing
- USP <88> , Class VI plastics
- USP <87>, Cytotoxicity
- USP <788>, Particulate Matter in Injections
- USP<85>, Bacterial Endotoxins
- ISO 11137, Sterility testing
- ISO 10993-4, Hemolysis testing



Ordering information

Sampling bag

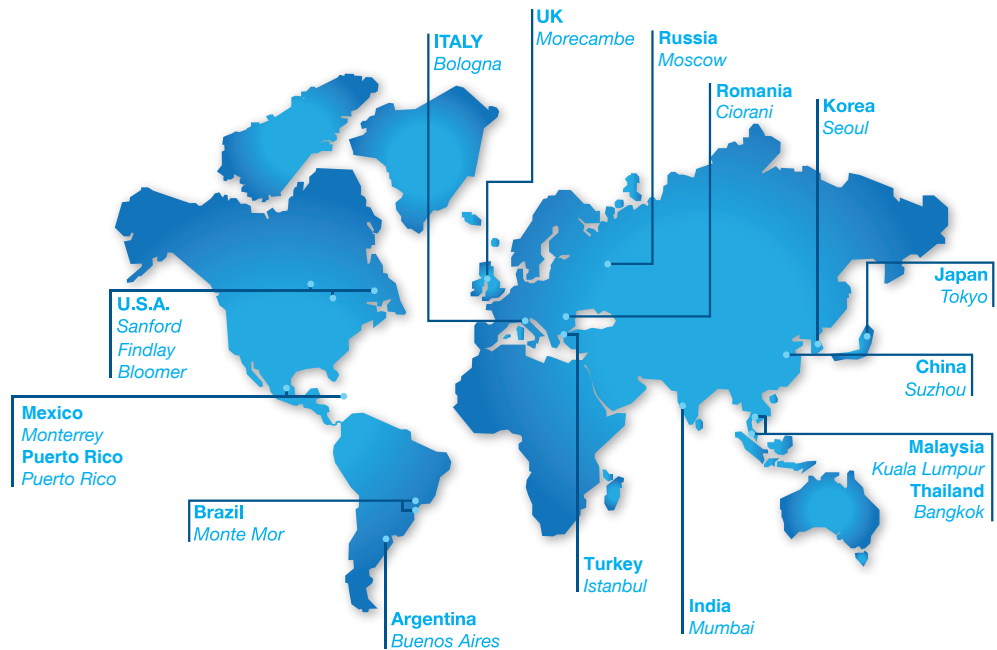
Product code	Volume	Inlet tubing	Outlet tubing
BIOGBSX050S005	50 mL	2 mm needle, silicone tubing, ID 3.2 mm*OD 6.4 mm, 25 cm in length, with a metal ring for sterile disconnection	Silicone tubing, ID 3.2 mm*OD 6.4 mm, 25 cm in length, with needleless sam-pling
BIOGBSX100S005	100 mL		
BIOGBSX250S005	250 mL		
BIOGBSX500S005	500 mL		
BIOGBSX0001S005	1000 mL	2 mm needle, silicone tubing, ID 3.2 mm*OD 6.4 mm, 25 cm in length, with a metal ring for sterile disconnection	Silicone tubing, ID 3.2 mm*OD 6.4 mm, 25 cm in length, with needleless sam-pling
BIOGBSX050S006	2 × 50 mL		
BIOGBSX100S006	2 × 100 mL		
BIOGBSX250S006	2 × 250 mL		
BIOGBSX050S007	3 × 50 mL	2 mm needle, silicone tubing, ID 3.2 mm*OD 6.4 mm, 25 cm in length, with a metal ring for sterile disconnection	Silicone tubing, ID 3.2 mm*OD 6.4 mm, 25 cm in length, with needleless sam-pling
BIOGBSX100S007	3 × 100 mL		
BIOGBSX250S007	3 × 250 mL		
BIOGBSX050S008	5 × 50 mL	2 mm needle, silicone tubing, ID 3.2 mm*OD 6.4 mm, 25 cm in length, with a metal ring for sterile disconnection	Silicone tubing, ID 3.2 mm*OD 6.4 mm, 25 cm in length, with needleless sam-pling
BIOGBSX100S008	5 × 100 mL		
BIOGBSX250S008	5 × 250 mL		

Sampling bottle

Product code	Volume	Inlet tubing	Outlet tubing
BIOGTSTGST037	20 mL	2 mm needle, silicone tubing, ID 3.2 mm*OD 6.4 mm, 25 cm in length, with metal ring for ster-ile disconnection	Silicone tubing, ID 3.2 mm*OD 6.4 mm, 25 cm in length, with vent filter
BIOGTSTGST038	50 mL		
BIOGTSTGST039	125 mL		
BIOGTSTGST040	250 mL		
BIOGTSTGST041	2 × 20 mL	2 mm needle, silicone tubing, ID 3.2 mm*OD 6.4 mm, 25 cm in length, with metal ring for ster-ile disconnection	Silicone tubing, ID 3.2 mm*OD 6.4 mm, 25 cm in length, with vent filter
BIOGTSTGST042	2 × 50 mL		
BIOGTSTGST043	2 × 125 mL		
BIOGTSTGST044	2 × 250 mL		
BIOGTSTGST045	3 × 20 mL	2 mm needle, silicone tubing, ID 3.2 mm*OD 6.4 mm, 25 cm in length, with metal ring for ster-ile disconnection	Silicone tubing, ID 3.2 mm*OD 6.4 mm, 25 cm in length, with vent filter
BIOGTSTGST046	3 × 50 mL		
BIOGTSTGST047	3 × 125 mL		
BIOGTSTGST048	3 × 250 mL		
BIOGTSTGST049	5 × 20 mL	2 mm needle, silicone tubing, ID 3.2 mm*OD 6.4 mm, 25 cm in length, with metal ring for ster-ile disconnection	Silicone tubing, ID 3.2 mm*OD 6.4 mm, 25 cm in length, with vent filter
BIOGTSTGST050	5 × 50 mL		
BIOGTSTGST051	5 × 125 mL		
BIOGTSTGST052	5 × 250 mL		

Sampling unit

Product code	Volume	Inlet tubing	Outlet tubing
BIOGTSTGST053	-	2 mm needle, silicone tubing, 3.2 mm (ID) × 6.4 mm (OD), 50 cm in length, with a metal ring for sterile disconnection and a male Luer and cap at the end	
BIOGTSTGST054	-	2 mm needle, C-Flex tubing, 3.2 mm (ID) × 6.4 mm (OD), 50 cm in length, with a male Luer and cap at the end	
BIOGTSTGST055	-	2 mm needle, PVC tubing, 3.2 mm (ID) × 6.4 mm (OD), 50 cm in length, with a male Luer and cap at the end	



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PRODUCT COLLECTION - Bio Bag

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