

Standard 2D and 3D Bags for Tanks

Saint-Gobain is a leading global supplier of 50 L to 500 L single-use bags for the biopharmaceutical industry. The standard 2D and 3D bags are designed to fit in standard cylindrical and rectangular bioprocessing tanks. Our single-use bags are constructed of a multilayer film optimized for bioprocess production applications. The film materials are consistent throughout the product range, with LLDPE as the fluid contact material and EVOH as the gas barrier layer. All standard products are free of animal-derived components. Saint-Gobain Bioprocess Systems are manufactured following cGMP that is QSR and ISO 9001: 2015 compliant. Bags are manufactured and assembled at our Plymouth, MN facility that operates a certified ISO Class 7 cleanroom. Our standard designs are ready to fit a range of bioprocess functions, or we can deliver custom products to meet your exacting needs.

Application

- Buffer and Media Storage
- Chromatography Feed
- Intermediate Product Hold

- Bioreactor Feed and Harvest
- Fraction Collection
- Final Product Hold











Technical Data Sheet

Features and Benefits:

- ❖ Temperature range -80°C to 60°C (-112°F to 140°F).
- Multilayer film structure with LLDPE as the fluid contact material and EVOH as the gas barrier layer.
- Needle-free sampling pot.
- Sealable and weldable tubing on the standard design.
- Sterilized by gamma irradiation.
- All formulas are Animal-Derived Component Free.
- All-inclusive Validation Guide and the Regulatory Information Overview (RIO) are available for customers upon request.

Physical Properties:

Property	ASTM Method	Formulations Value	Unit
Thickness	-	12.0	Millimeter
Tensile Strength (MD)	D882A	5300	psi
Tear Resistance	D1922	>800	grams
Seam Strength	D882	>25	Lbs./in
Dart Impact	D1709	>1600	grams
O ₂ Transmission Rate	D412	<0.005	cc/m ² /24 hr
CO ₂ Transmission Rate	D395	<1.0	cc/m ² /24 hr
Water Vapor Transmission Rate	D746	2.66 to 2.68	g/m²/24 hr
Operating Temperature	-	-80°C to 60°C	°C





Material of Construction

Multilayer Film Structure

Saint-Gobain single-use bags are constructed of multilayer film optimized for bioprocess production applications. Film materials are consistent throughout the product range and are free of materials of animal origin. Offering outstanding biocompatibility, chemical compatibility, barrier, and strength properties, Saint-Gobain films meet the most demanding bioprocess applications.

Fluid Contact Layer - Linear Low-Density Polyethylene (LLDPE)

Provides outstanding biocompatibility with broad chemical compatibility for the safe handling of a wide range of biopharmaceutical liquids.

Gas Barrier Layer- Ethyl Vinyl Alcohol (EVOH)

Provides an excellent barrier to the transmission of oxygen and carbon dioxide.

Strength Layer - Nylon

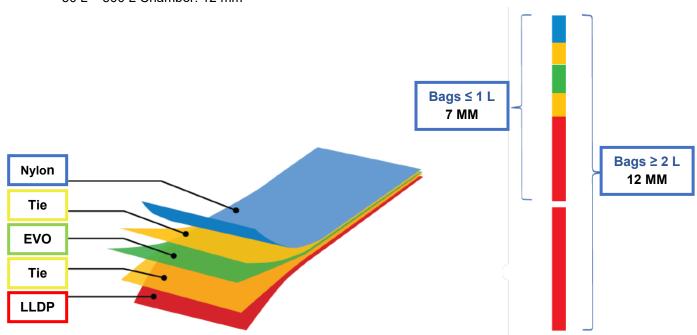
Provides outstanding impact and tear resistance, optimizing the overall toughness of the bag.

Tie Structure

Multiple materials provide bonding between layers and add to the overall performance of the bag.

Film Thickness

■ 50 L – 500 L Chamber: 12 mm







Regulatory Compliance (Biocompatibility, Physicochemical & Extractable Testing):

Summary of Results: Standard 2D and 3D Bags for Tanks			
Method Description	Reference Standard	Result	
Genotoxicity Test	ISO 10993-3	Meets Criteria	
In Vitro Cytotoxicity	ISO 10993-5	Meets Criteria	
USP Class VI – Biological Reactivity	USP <88>	Meets Criteria	
Bacterial Endotoxin	USP <85>	< 0.03EU/mL	
Subvisible Particulate	USP <788>	Meets Criteria	
Bioburden	ISO 11737-1	< 3 CFU/sample	
Extractables Data	Saint-Gobain Protocol	N/A	

Sterilization:

Microbiological Validation of	Test Protocol	Result
25kGy Radiation Sterilization	ANSI/AAMI/ISO 11137	10 ⁻⁶ SAL 3-Year Expiry

- All part numbers referenced in this document are individually double-pouched within their case and gamma-irradiated at 25-40kGy without sterility assurance.
- Custom bags can be provided with no gamma irradiation, with gamma irradiation, or with gamma irradiation and SAL 10⁻⁶

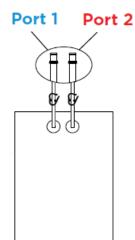
2D Bags for Cylindrical Tanks, 2 Ports (30-in Tubing), 50 L to 200L











Bottom Drain Available

2D Pillow Construction

Ordering Guide:

Part Number	Description	Dimensions LxW in (cm)	Quantity per Case
BP0050LP	50 L Bag, STD 2 ports	38.5 in x 21.75 in (97.79 cm x 55.25 cm)	10
BP0100LP	100 L Bag, STD 2 ports	45.5 in x 29.5 in (115.6 cm x 74.9 cm)	10
BP0200LP	200 L Bag, STD 2 ports	58.5 in x 35.0 in (148.59 cm x 88.90 cm)	10

Port Information:

Port 1: MPC Insert, Port Cover, Pinch Clamp

Port 2: MPC Insert, Port Cover, Pinch Clamp

Tubing Information (Both Ports):

Material: Clear C-Flex® 374

Length: 30-inch / 762 Millimeter

OD: 5/8-in / 15.9 mm ID: 3/8-in / 9.6 mm

Wall Thickness: 1/8-in / 3.2mm

3D Bags for Cylindrical Tanks, 3 Ports (30-in Tubing), 50 L to 500L

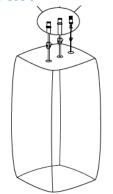








Port 1 Port 2 Port 3



Bottom Drain Available

3D Construction

Ordering Guide:

Part Number	Description	Dimensions LxWxH in (cm)	Quantity per Case
BP0050LD	50 L 3D Bag, STD 3 ports	11 in x 11 in x 27.5 in (27.94 cm x 27.94 cm x 69.85 cm)	10
BP0100LD	100 L 3D Bag, STD 3 ports	15 in x 15 in x 30.5 in (38.1 cm x 38.1 cm x 77.47 cm)	10
BP0200LD	200 L 3D Bag, STD 3 ports	17.5 in x 17.5 in x 41 in (44.45 cm x 44.45 cm x 104.4 cm)	10
BP0300LD	300 L 3D Bag, STD 3 ports	19 in x 19 in x 52.5 in (48.26 cm x 48.26 cm x 133.4 cm)	4
BP0500LD	500 L 3D Bag, STD 3 ports	39.25 in x 39.25 in x 42.25 in (99.7 cm x 99.7 cm x 107.3 cm)	4

Port Information:

Port 1: MPX Insert, MPX Cap, Pinch Clamp
Port 2: MPX Insert, MPX Cap, Pinch Clamp

Port 3: LL Female + Needle-Free Sampling Port, Luer Cap, Pinch Clamp

Tubing Information:

Port 1	Port 2	Port 3
Material: Clear C-Flex® 374	Material: Clear C-Flex® 374	Material: Clear C-Flex® 374
Length: 30-inch / 762 Millimeter	Length: 30-inch / 762 Millimeter	Length: 30-inch / 762 Millimeter
OD: 3/4-in / 19.1 mm	OD: 3/4-in / 19.1 mm	OD: 1/4-in / 6.4 mm
ID: 1/2-in / 12.7 mm	ID: 1/2-in / 12.7 mm	ID: 1/8-in / 3.2 mm
Wall Thickness: 1/8-in / 3.2mm	Wall Thickness: 1/8-in / 3.2mm	Wall Thickness: 1/16-in / 1.6mm

3D Bags for Rectangular Tanks, 4 Ports (30-in Tubing), 200 L and 500L

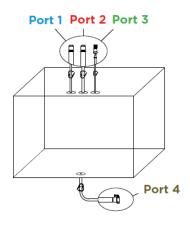












3D Construction

Ordering Guide:

Part Number	Description	Dimensions LxWxH in (cm)	Quantity per Case
BP0200LB	200 L 3D Bag, STD 4 ports	30 in x 22 in x 22 in (76.2 cm x 55.88 cm x 55.88 cm)	4
BP0500LB	500 L 3D Bag, STD 4 ports	45.5 in x 30 in x 27 in (115.6 cm x 76.2 cm x 68.58 cm)	4

Port Information:

Port 1: MPX Insert, MPX Cap, Pinch Clamp

Port 2: MPX Insert, MPX Cap, Pinch Clamp

Port 3: LL Female + Needle-Free Sampling Port, Luer Cap, Pinch Clamp

Port 4: MPX Insert, MPX Cap, Pinch Clamp

Tubing Information:

Port 1	Port 2	Port 3	Port 4
Material: Clear C-Flex® 374	Material: Clear C-Flex® 374	Material: Clear C-Flex® 374	Material: Clear C-Flex® 374
Length: 30-inch / 762 mm	Length: 30-inch / 762 mm	Length: 30-inch / 762 mm	Length: 30-inch / 762 mm
OD: 3/4-in / 19.1 mm	OD: 3/4-in / 19.1 mm	OD: 1/4-in / 6.4 mm	OD: 3/4-in / 19.1 mm
ID: 1/2-in / 12.7 mm	ID: 1/2-in / 12.7 mm	ID: 1/8-in / 3.2 mm	ID: 1/2-in / 12.7 mm
Wall Thickness: 1/8-in / 3.2mm	Wall Thickness: 1/8-in / 3.2mm	Wall Thickness: 1/16-in / 1.6mm	Wall Thickness: 1/8-in / 3.2mm



