

MASTERFLEX®

Single-Use Bioprocessing Bags & Tank Liners

Standard, configured-to-order and
engineered-to-order options



When you transfer or store process fluids, buffers and valuable bioprocess materials, you need single-use solutions that help protect product integrity while supporting efficient fluid handling. The right single-use bag should do more than contain your product; it should adapt to your process and regulatory needs.

Masterflex® single-use bags and tank liners are designed for mixing, storage and buffer management applications. Available as standard, configure-to-order (CTO) and engineer-to-order (ETO) options, the wide Masterflex portfolio gives you the flexibility to select products and configurations based on your process requirements a regulatory needs.

SINGLE-USE PORTFOLIO

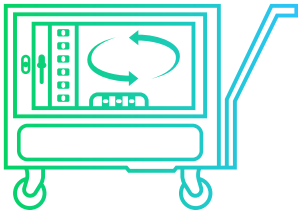
2D bags	3D bags	Tank liners
		

Single-use bags designed for confidence

Masterflex 2D, 3D and mixing bags support transfer, storage, mixing and buffer management applications, with standard, CTO and ETO options to meet your manufacturing requirements.

- Made from Masterflex Clear Inert Gas Barrier (IGB-C) film
- Film meets USP<85>, USP<788>, USP<88>, USP<87>, USP<661>
- Validation guide and documentation support for ease of qualification
- BPOG E&L Report available
- Choose tubing, connectors and more from one of the world's largest validated component libraries.

APPLICATIONS

Mixing	Storage	Buffer management
		

2D BAGS

Streamline buffer and media handling, sampling, and fluid transfer with Masterflex 2D bioprocess bags. Available in standard volumes from 50 ml to 50 L, these bags can be tailored to your process with a wide selection of port configurations, tubing options, and connectors, or fully customized to meet unique application requirements.

AVAILABLE AS:

Standard	Configure-to-order	Engineer-to-order
17 standard catalog bags with C-Flex or Silicon tubing	13 available bag blank designs (50 ml to 50 L). Choose tubing, connectors and more from the Avantor component library.	Our ETO bag assemblies can be tailored to fit your needs, with your choice of number and type of ports, tubing and connectors selected from our vast component library.

AVAILABLE CATALOG PRODUCTS

Part No	Description	Tubing
1002501	50 ml Pillow Bag, 2 ports welding	C-Flex
1002502	500 ml Pillow Bag, 2 ports welding	C-Flex
1002503	1 L Pillow Bag, 2 ports welding	C-Flex
1002504	5 L Pillow Bag, 3 ports welding	C-Flex
1002526	10 L Pillow Bag, 3 ports welding	C-Flex
1002527	20 L Pillow Bag, 3 ports welding	C-Flex
1002528	50 L Pillow Bag, 3 ports welding	C-Flex
1002529	50 ml Pillow Bag, 2 ports Luer	Silicone
1002530	500 ml Pillow Bag, 2 ports Luer	Silicone
1002531	1 L Pillow Bag, 2 ports Luer	Silicone
1002532	50 ml Pillow Bag, 2 ports MPC	Silicone
1002533	500 ml Pillow Bag, 2 ports MPC	Silicone
1002534	1 L Pillow Bag, 2 ports MPC	Silicone
1002535	5 L Pillow Bag, 3 ports MPC	Silicone
1002536	10 L Pillow Bag, 3 ports MPC	Silicone
1002537	20 L Pillow Bag, 3 ports MPC	Silicone
1002538	50 L Pillow Bag, 3 ports MPC	Silicone



3D BAGS

Designed for secure storage, transfer and mixing of larger-volume process fluids, Masterflex 3D bioprocessing and mixing bags are available in standard sizes up to 1,500 L. Customizable port layouts, tubing configurations and connector options enable seamless integration with your Masterflex containers, Magnetic Mixer and Quattro Mixer systems.

AVAILABLE AS:

Standard	Configure-To-Order	Engineer-To-Order
7 standard catalog bag assemblies with 4 ports for seamless filling and draining designed to fit Masterflex Bioprocess Containers.	15 available bag blank designs with either 3 or 4 ports. Choose tubing, connectors and more from the Avantor component library.	Our ETO bag assemblies can be tailored to fit your needs, with your choice of number and type of ports, tubing and connectors selected from our vast component library.

AVAILABLE CATALOG PRODUCTS

Part No.	Product description	Part No.	Product description
1009985	50 L 3D, 4 PORT & TUBING	1009988	500 L 3D, 4 PORT & TUBING
1009986	100 L 3D, 4 PORT & TUBING	1009989	1000 L 3D, 4 PORT & TUBING
1009987	200 L 3D, 4 PORT & TUBING	1009991	1500 L 3D, 4 PORT & TUBING

*2000 L available as an ETO solution.



STANDARD 3D MIXING BAGS

Part No	Description
1012688	5 L Magnetic Mixing Bag 3 top ports, 1 bottom drain port
1012689	5 L Magnetic Mixing Bag 3 top ports, 1 bottom drain port WITH 1.5" TC PORT
1012690	10 L Magnetic Mixing Bag 3 top ports, 1 bottom drain port
1012691	10 L Magnetic Mixing Bag 3 top ports, 1 bottom drain port WITH 1.5" TC PORT
1013940	5 L Magnetic Mixing Bag 3 top ports, 1 bottom drain port WITH pH SENSOR
1013941	5 L Magnetic Mixing Bag 3 top ports, 1 bottom drain port WITH pH SENSOR 1.5" & TC PORT
1013942	10 L Magnetic Mixing Bag 3 top ports, 1 bottom drain port WITH pH SENSOR
1013943	10 L Magnetic Mixing Bag 3 top ports, 1 bottom drain port WITH pH SENSOR & 1.5" TC PORT
1014910	20 L Magnetic Mixing Bag 3 top ports, 1 bottom drain port
1014911	20 L Magnetic Mixing Bag 3 top ports, 1 bottom drain port WITH 1.5" TC PORT
1014912	20 L Magnetic Mixing Bag 3 top ports, 1 bottom drain port WITH pH SENSOR
1014913	20 L Magnetic Mixing Bag 3 top ports, 1 bottom drain port WITH pH SENSOR & 1.5" TC PORT
1010330	50 L Magnetic Mixing BAG Bag 3 top ports, 1 bottom drain port
1010331	50 L Magnetic Mixing BAG Bag 3 top ports, 1 bottom drain port pH COND SENS 4" TC Port
1010332	100 L Magnetic Mixing BAG Bag 3 top ports, 1 bottom drain port
1010333	100 L Magnetic Mixing BAG Bag 3 top ports, 1 bottom drain port pH COND SENS 4" TC Port
1010334	200 L Magnetic Mixing BAG Bag 3 top ports, 1 bottom drain port
1010335	200 L Magnetic Mixing BAG Bag 3 top ports, 1 bottom drain port pH COND SENS 4" TC Port
1010336	500 L Magnetic Mixing BAG Bag 3 top ports, 1 bottom drain port
1010337	500 L Magnetic Mixing BAG Bag 3 top ports, 1 bottom drain port pH COND SENS 4" TC Port
1010924	1000 L Magnetic Mixing BAG Bag 3 top ports, 1 bottom drain port pH COND SENS 4" TC Port
1010925	1000 L Magnetic Mixing BAG Bag 3 top ports, 1 bottom drain port
1010935	1500 L Magnetic Mixing BAG Bag 3 top ports, 1 bottom drain port pH COND SENS 4" TC Port
1010937	1500 L Magnetic Mixing BAG Bag 3 top ports, 1 bottom drain port



Tank liners

Reliable storage and mixing for integrated bioprocessing

Masterflex tank liners are available as standard 2D liners for cylindrical drums up to 560 L and as 3D liners for cubical containers up to 2,000 L. Compatible with Masterflex Top Mixer systems, cylindrical drums, and stainless steel or plastic containers.

- Made from Avantor Medium Gauge Inert (MGI) film
- Film meets USP<85>, USP<788>, USP<88>, USP<87>, USP<661>
- Validation guide and documentation support for ease of qualification

Open top mixing	Buffer management
	

AVAILABLE CATALOG PRODUCT

Part No	Product description
1003001	19 L 2D Tankliner
1003002	38 L 2D Tankliner
1003003	50 L 2D Tankliner
1003004	100 L 2D Tankliner
1003005	200 L 2D Tankliner
1003006	300 L 2D Tankliner
1003007	560 L 2D Tankliner
1003008	50 L 3D Tankliner
1003009	100 L 3D Tankliner
1003010	200 L 3D Tankliner
1003011	300 L 3D Tankliner
1003012	560 L 3D Tankliner
1003013	50 L 3D Tankliner Bottom Drain
1003014	100 L 3D Tankliner Bottom Drain
1003015	200 L 3D Tankliner Bottom Drain
1003016	300 L 3D Tankliner Bottom Drain
1003017	560 L 3D Tankliner Bottom Drain



Film technologies

Masterflex® offers a portfolio of film technologies developed to support a broad range of bioprocess applications, helping customers match the appropriate film to their process requirements while maintaining confidence in product quality, process compatibility and manufacturing performance.

Descriptive name	Application
Masterflex anti-static (AS) film	Powder
Masterflex medium gauge inert (MGI) film	Tank liners
Masterflex heavy gauge inert (HGI) film	Tank liners
Masterflex clear inert gas barrier (IGB) film	Default film for 2D, 3D and mixing bags

HGI FILM

Outer Layer	
PE	160 µm
ULDPE	190 µm
Contact Layer	

MGI FILM

Outer Layer	
PA	15 µm
PE	160 µm
PA	15 µm
PE	150 µm
Contact Layer	

AS FILM

Mono Layer PE	
PE	240 µm

IGB FILM

Outer Layer	
PE	50 µm
Tie	10 µm
EVOH	20 µm
Tie	10 µm
ULDPE	230 µm
Contact Layer	

Acronyms: PE; PolyEthylene, ULDPE; Ultra Low Density PolyEthylene, PA; Polyamide, EVA; Ethylene-vinyl acetate, LLDPE; , EVOH; Ethylene-vinyl alcohol.

Tie is a thin adhesive layer bonding both polar (EVOH) and non-polar (PE) film layers.

Bioprocess solutions designed around your process

From proven products to tailored solutions

No two manufacturing processes are exactly alike, and that means single-use solutions need to be flexible enough to support different requirements without compromising performance. Masterflex products have earned the trust of biopharmaceutical manufacturers through decades of fluid handling expertise.

Today, that same engineering approach extends to single-use bags, tank liners and film technologies, helping customers build reliable solutions designed around their process requirements. Whether you need a standard product, a configured solution or a fully customized assembly, we work with you to identify the right approach.

CHOOSE THE SOLUTION THAT FITS YOUR PROCESS

Standard

Ready-to-order catalog products for common bioprocess applications.

Best suited for:

- Routine applications
- Fast product availability
- Standardized process requirements

CTO

Start with a standard product and configure it with the tubing, connectors, fittings and other components that best support your process.

Best suited for:

- Existing manufacturing platforms
- Site-specific preferences
- Greater flexibility without a fully custom design

ETO

Work directly with our engineers to develop a fully customized solution for your application.

Best suited for:

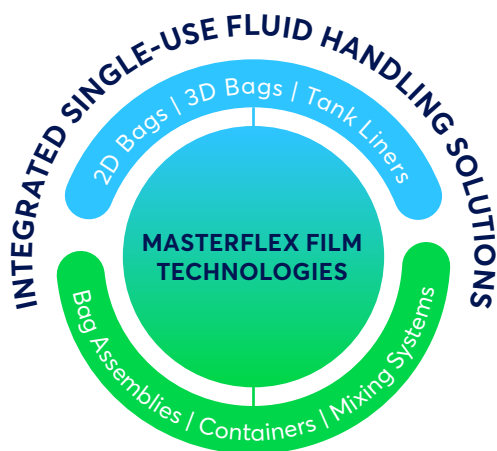
- Complex manufacturing processes
- Unique system requirements
- Specialized fluid handling challenges

Engineering expertise	Validated component library	Qualification support	Controlled manufacturing
Experienced specialists help develop solutions tailored to your process.	Choose from a broad selection of proven components to support flexible solution design.	Documentation and technical resources help simplify implementation.	Consistent manufacturing processes support product quality and reliability.

Complete solutions. Trusted expertise.

Managing multiple suppliers and disconnected components can add complexity to single-use manufacturing. Masterflex combines single-use bags, tank liners and film technologies with complementary fluid handling systems to help customers simplify procurement, support process consistency and build solutions with confidence. Designed to work together, these products give you the flexibility to source individual components or develop complete single-use systems tailored to your process requirements.

DESIGNED TO WORK TOGETHER



Rather than sourcing individual components from multiple suppliers, Avantor enables you to combine compatible products into an integrated single-use solution designed around your process requirements.

WHY CHOOSE MASTERFLEX?

Complete portfolio	Flexible solution approach	Trusted expertise	Support throughout your process
			
Single-use bags, tank liners and film technologies supported by complementary fluid handling systems.	Standard, CTO and ETO options options designed around your manufacturing requirements.	Decades of fluid handling expertise supporting reliable single-use solutions.	Documentation, technical resources and engineering support from product selection through implementation.

Let's discuss your process.

Whether you're selecting a standard product, configuring an existing design or developing a fully customized solution, Avantor experts can help identify the right approach for your application.

For more information, visit avantorsciences.com or contact an [expert](#).



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