



PRODUCTS



StatGuard

Type D Antistatic FIBC

Engineered for maximum safety in flammable and explosive environments, StatGuard™ actively prevents electrostatic hazards without the need for grounding. Reliable, efficient, and fully compliant with international safety standards - protecting your operations with every load.



Find us at www.fps.com

StatGuard

Safe, Fully Compliant and Reliable

StatGuard provides superior protection against static electricity, ensuring safe handling in hazardous environments. Special antistatic fibers dissipate static charges at low energy levels through the corona discharge effect. Unlike traditional solutions, StatGuard requires no grounding, making it ideal for transporting sensitive materials such as fine powders, chemicals, and pharmaceuticals. Fully compliant with IEC 61340-4-4, FPS StatGuard bags deliver reliability and peace of mind for your filling & discharging operations.



Key Features and Benefits of StatGuard

- Full compliance with IEC 61340-4-4 Ed. 3.0 Type D** qualification and testing parameters, with a breakdown voltage (fabrics) of <6 kV (IEC 61340-4-4 section 7.2) and no ignition in Discharge Incendivity Testing (IEC 61340-4-4 sections 7.3.2 & 9.2).
- Food-Approved Solution:** Manufactured in a controlled environment with optional metal detection and clean room production.
- Unique Construction:** Utilizes permanent anti-static fibers.

- Versatile FIBCs:** Available with or without inner liners, including dissipative fabric, L2 liners for Type D applications, and form-stable designs for optimized storage & transport.
- Guaranteed Safety & Reliability:** End-to-end process control, in-house production of critical components, and a vertically integrated operation.
- Sustainable Reconditioning:** StatGuard is suitable for multi-trip FIBC Reconditioning at our Recycling Hub in Romania.
- Expert Product Support:** In-house specialists to assist with FIBC selection and guidance.



StatGuard

Safe, Fully Compliant and Reliable

Liner Classification in IEC 61340-4-4

- L1** Inner liners made from materials with surface resistivity on at least one surface less than or equal to $1,0 \times 10^8 \Omega$.
- L2** **Permanent anti-static inner liners** made from materials with surface resistivity between $1,0 \times 10^9 \Omega$ and $1,0 \times 10^{12} \Omega$ at both sides.
When only one side anti-static (i.e. $1,0 \times 10^9 \Omega$ and $1,0 \times 10^{12} \Omega$) then the breakdown voltage shall be less than 4 kV.
- L3** Inner liners made from materials with surface resistivity of greater than $1,0 \times 10^{12} \Omega$. The breakdown voltage through the material shall be less than 4 kV.

Combination of FIBC & Inner Liners

FIBC Type	Qualified Liner
Type B	L2 & L3
Type C	L1 & L2
Type D	L2

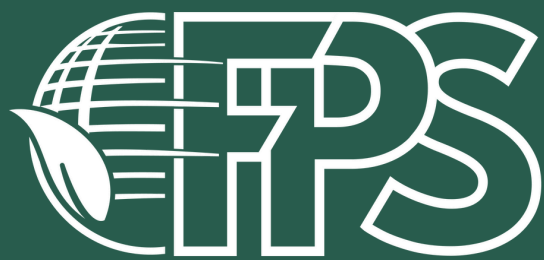
Source: IEC 61340-4-4 Table 5 – Inner liners and FIBC combinations that are permissible and not permissible in hazardous explosive atmospheres.

FIBC Classification in IEC 61340-4-4

Bulk Product in FIBC		Surroundings	
MIE of Dust	Non-flammable atmosphere	Dust zones 21-22 $1000 \text{ mJ} \geq \text{MIE} > 3 \text{ mJ}$	Gas zones 1-2 (Explosion groups IIA/IIIB) Or dust zones 21-22 ($\text{MIE} \leq 3 \text{ mJ}$)
$\text{MIE} > 1000 \text{ mJ}$	A, B, C, D	B, C, D	C, D ¹
$1000 \text{ mJ} \geq \text{MIE} > 3 \text{ mJ}$	B, C, D	B, C, D	C, D ¹
$\text{MIE} \leq 3 \text{ mJ}$	C, D	C, D	C, D ¹

1 - Use of Type D shall be limited to explosion groups IIA/IIIB with $\text{MIE} \geq 0.14 \text{ mJ}$.

	TYPE B	TYPE C	TYPE D
Need for FIBC grounding & special handling equipment	NO	YES	NO ✓
Compliance with EC 10/2011 & FDA food contact regulation	YES no limitations on designs	YES Coated fabric, liner or net baffle designs	YES ✓ no limitations on designs
Possibility to control the FIBC with metal detection	YES	NO	YES ✓
Dissipation of static charge via unique built in characteristics	NO	NO requires grounding	YES ✓



Flexible Packaging Solutions