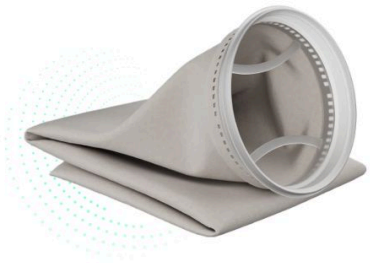
DUST BAG FILTERS

PTFE Teflon Bag Filter

Dust filter made from 100% polytetrafluoroethylene (PTFE) fibres by the needle-punched felt method. With 240 °C continuous operation, pH 0–14 chemical resistance and a non-stick surface, it is used on aggressive, humid and corrosive flue gas lines where other media break down.



CONTINUOUS TEMPERATURE	WEIGHT	CHEMICAL	EMISSIONS
240 °C	**700–800 g/m²**	**pH 0–14**	**≤ 1 mg/Nm³**
Peak 260 °C · dry	100% PTFE needle-punched felt	Acids, alkalis, corrosive gases	With ePTFE membrane

Technical specifications

Fibre type	PTFE (polytetrafluoroethylene / Teflon), 100% pure
Fabric structure	Needle-punched felt
Weight	700–800 g/m²
Continuous operating temperature	240 °C (dry)
Peak (surge) temperature	260 °C (dry)
Chemical resistance	pH 0–14 · resistant to acids, alkalis, oil vapours and corrosive gases
Hydrolysis resistance	Excellent; stable through humidity, condensation and dew point transitions
Surface property	Naturally non-stick; low surface energy, easy dust release
Emissions	≤ 5 mg/Nm³ · ≤ 1 mg/Nm³ with ePTFE membrane
Surface treatments	Singeing · Calendering · ePTFE membrane · Antistatic
Seam	100% PTFE sewing thread · triple-row stitching
Cage support	Cage with at least 20 vertical wires is mandatory
Cleaning system	Pulse-jet · Reverse air · Shaker
Custom production	Non-standard diameter, length and surface treatment

Temperature and chemical resistance

CONDITION	VALUE
Continuous operation	240 °C (dry)
Peak (surge)	260 °C (dry)
Acids	Resistant down to pH 0
Alkalis	Resistant up to pH 14
Hydrolysis / humidity	Excellent
Oil vapour, corrosive gas	High resistance
Strongly oxidising environment	Preferred over PPS

Media comparison

Versus PPS

Wider chemical resistance (pH 0–14) and higher temperature (240 °C vs 190 °C).

Versus Nomex

Withstands 240 °C and clearly leads in chemical resistance; higher cost.

Seam construction

Triple-row stitching with 100% PTFE thread; no risk of thermal or chemical melting.

Surface treatment options

SURFACE TREATMENT	PROPERTY	RECOMMENDED APPLICATION
Singeing	Smooths the surface, improves dust release	General high-temperature and chemical applications
Calendering	Smooths the surface; pulse-jet compatible	General industrial applications
ePTFE membrane	Surface filtration, ≤ 1 mg/Nm³ emissions, high dust release	Applications with ultra-low emission limits
Antistatic	Helps dissipate static charges in a controlled way	Applications involving combustible dust

Use and maintenance

- Use a cage with at least 20 vertical wires; do not put the bag into service on a cage with fewer wires.
- Flue gas must not exceed the 240 °C continuous and 260 °C peak limits; monitor temperature.
- Keep the pulse-jet cleaning pressure within the recommended range.
- Check the cage when changing bags; do not use deformed or rusted cages.
- Choose an ePTFE membrane on lines requiring ultra-low emissions and antistatic treatment for combustible dusts.

Values in this data sheet are typical and for information only. Product selection should be made with our engineers based on process fluid, temperature, pressure and flow conditions. Proses T.İ.M. reserves the right to change product specifications without prior notice.

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Proses Ticaret İmalat Mühendislik Ltd. Şti.
Musa Gündüz Cad. No:14 Taşköprü, Çiftlikköy / Yalova, Türkiye

+90 226 353 35 70 · Head office
sales@prosestim.com
prosestim.com/en

Product page