LIQUID BAG FILTERS

SPS Bag Filter

Three-layer synthetic depth filter bag with a polypropylene core between two spunbond outer layers. Made to process requirements for 0.5–0.8 µm fine particle retention in high-viscosity liquids containing acids, alkalis and solvents.



CONSTRUCTION	PRECISION	CHEMICAL RESISTANCE	MAX. TEMPERATURE
3 layers	**0.5–0.8 µm**	**pH 1–14**	**90 °C**
Spunbond · PP · spunbond	In high-viscosity liquids	Acids, alkalis, many solvents	Continuous operation

Technical specifications

Construction	Three-layer lamination: spunbond outer · PP core · spunbond inner
Outer and inner layers	Spunbond nonwoven fabric; mechanical strength and fibre migration protection
Middle layer	Polypropylene (PP); high dirt-holding capacity and chemical resistance across the full pH range
Micron rating	0.5–0.8 µm (in high-viscosity liquids; varies by process)
Filtration type	Depth filtration
Max. operating temperature	90 °C (continuous)
Chemical resistance	pH 1–14 · compatible with acids, alkalis and many solvents
Recommended change-out ΔP	2–2.5 bar
Viscosity compatibility	Depth filtration in thick, heavy process liquids
Oil absorption	None (synthetic core); for oil retention, SCS or PCP
Silicone content	Silicone-free, additive-free synthetic construction
Production type	Made to order for each process (not a stock item)

Layer structure

LAYER	MATERIAL	FUNCTION
Outer layer (inlet surface)	Spunbond nonwoven fabric	Retains large particles as a pre-stage, protecting the PP core; provides mechanical strength.
Middle layer	Polypropylene (PP)	Retains fine particles down to 0.5 µm in high-viscosity liquids; provides pH 1–14 chemical resistance.
Inner layer (outlet surface)	Spunbond nonwoven fabric	Stops fibres that may come loose from the PP layer from entering the clean liquid; provides dimensional stability.

SCS and SPS comparison

TYPE	CORE	CHEMICAL RESISTANCE	OIL ABSORPTION	PREFERRED FOR
SCS	Natural cotton	Limited	Yes (free oil)	Oily, dense liquids
SPS	Polypropylene	pH 1–14	No	Chemically aggressive, viscous liquids

Information needed for custom production

Liquid and viscosity
Type of process liquid and its viscosity.

Temperature and chemistry
Operating temperature and chemical content of the liquid.

Precision
Required filtration precision.

Use and maintenance

- Make sure the process temperature does not exceed 90 °C.
- Replace the bag when the differential pressure reaches 2–2.5 bar.
- For processes where free oil must be retained, consider an SCS or PCP bag with a cotton core.
- As the product is made to process requirements, share liquid type, viscosity, temperature and chemical content before ordering.

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.

PROSES T.İ.M.®
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