

Product specification sheet

- Applicable for screening & separation equipment, feeding & dosing systems, bulk handling & storage, conveying & transport systems, processing & thermal equipment, flow control components, air handling systems, and flexible protective components.
- PU-UF1 is a clear, high-gloss, ether-based thermoplastic Poly Urethane that does not fracture under constant flexing, as it has no memory.
- Great chemical resistance for CIP and cleaning processes
- Excellent abrasion resistance
- The perfect material for seamless welding



Physical properties

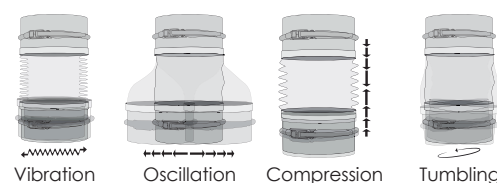
Material	Ether-based thermoplastic Poly Urethane
Color	Transparant
Surface finish	Gloss/Gloss
Surface roughness	Ra < 0,1µm
Wall thickness	1,00mm / 0.0394 inch
Hardness	86° Shore A
Tensile strength	50 MPa
Tear resistance	55 N/mm
Surface resistance	$5 \times 10^{12} \Omega$
Volume resistance	$3 \times 10^{11} \Omega m$
Pressure resistance	-0,2 to 0,34 Bar -2.9 to 4.9 PSI
Maximum elongation	600%
Operating temperature	-40°C to 90°C -40°F to 194°F
Maximum surge temperature	120°C/248°F
Low temperature flexibility	Good
Air permeability	0
Black-out characteristic	 (31660 lux)
Type of material	Sheet on roll Roll width: 1.500mm Roll length: 50.000mm

Production methods

PU-UF1 sheets will be welded together, using one of the following welding methods.

- High Frequency welding (HF-welding)
- Heat contact welding (HC-welding)
- Hot air welding (HA-welding)

To create parts with the correct measurement, the material can be cut using either a stainless steel knife or water jet



Compliance

United States	FDA 21 CFR 177.1680
European Community	EC 1935/2004 EC 2023/2006 EC 10/2011 EU 2023/1627 EU 2020/1245 EU 2025/351 EU 2026/250 EC 1907/2006 (REACH) EC 2019/1338 EU 1169/2011 annex II
China	GB 4806.7-2016 * GB 9685-2016 * GB 5009.156 * GB 31604.1 - 2015 *

* Restrictions apply. A copy of all certificates can be downloaded or will be sent upon request. We will be happy to advise further if you have any questions.

ATEX compliance

PU-UF1 has been tested for its electrostatic properties and has been found ATEX compliant and safe to use in all dust explosion hazardous areas. (ATEX-zones 20/21/22)

Production methods

Below you will find images of products that are made with PU-UF1, showing just a few of the nearly endless possibilities the material offers. For questions or more information about the possibilities, please contact us!



Relatable materials

For certain applications, it might be requested to use a different material than the PU-UF1. Therefore, Filcoflex B.V. has a wide product range of various materials which are similar to PU-UF1, but also have other properties. Below, you will find a list of some of these similar materials.

If you wish to know more about these materials, please feel free to contact sales@filcoflex.com. Or visit their material pages on the website.

PU-UF03 (0,3mm)

PU-UF05 (0,5mm)

PU-UF07 (0,7mm)



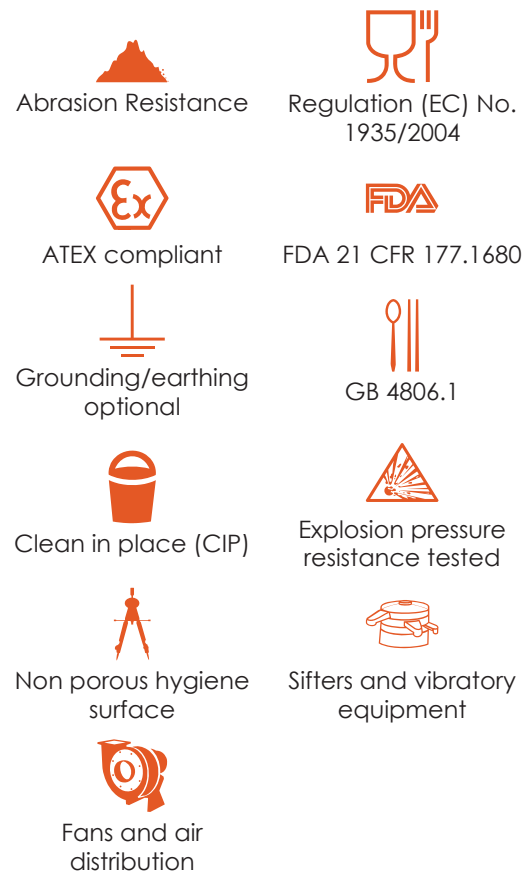
PU-UF15 (1,5mm)

PU-UF3 (1mm)

PU-AS10 (1mm)



Compliances



Industries

