

DESCRIPTION

TPU FLEX is a durable elastomere based on Polycaprolacton-Polyester. It was specially developed for industrial applications and is ideally suited for the production of elastic and damping components. The material is optimized for the FFF/FDM process in regards to thermal stability and better flow properties. The raw material is compliant according to the REACH- and RoHS-Standards.

FEATURES

- Good mechanical properties
- Excellent chemical resistance
- Free of silicone, softeners and oil
- Free of halogen
- UV-Resistant

PROPERTIES 1

TEST	METHOD	UNIT	VALUE
Tensile modulus (E-Modulus)	ISO 527-2/5A/500	MPa	40
Ultimate elongation	ISO 527-2/5A/500	%	475
Stress at break	ISO 527-2/5A/500	MPa	- (50%)
	ISO 527-2/5A/500	MPa	17 (100%)
	ISO 527-2/5A/500	MPa	30 (300%)
VICAT A (VST)	ISO 306	°C	110*
Melting temperature	ISO 3146-C	°C	190-220
Density	ISO 2781	g/cm³	1.19
Abrasion resistance	ISO 4649-A	mm³	25
Shore hardness	ISO 868	Shore	98A
Tear strength unnicked	ISO 34-1B	kN/m	170
Glass transition temperature		°C	-30
Permeability AIR	DIN 53380	25º/60ºC	450/-
Permeability N2	DIN 53380	25º/60ºC	330/1800
Permeability 02	DIN 53380	25º/60ºC	840/4500
Permeability CO2	DIN 53380	25º/60ºC	6500/19000
Permeability N2O	DIN 53380	25º/60ºC	12400/-

*Temperature resistance tested at a minimum wall thickness of 4 mm.

CERTIFICATIONS & ADDITIONAL INFORMATION 2











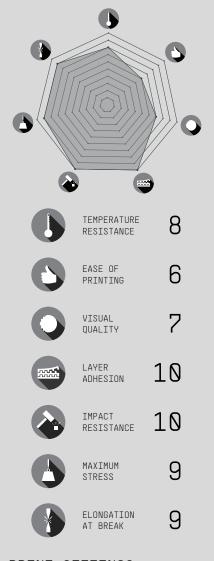
FREE OF SILICONE



SHORE 98A

STORAGE AND SHELF LIFE

Store in a dry room at room temperature (18-27 $^{\circ}$ C / 65-80 $^{\circ}$ F). Keep out of direct heat and sunlight. When stored correctly, this material has a shelf life of 2 years.



PRINT SETTINGS

Nozzle	230-250°C
Heatbed	50-60°C
Adhesive	not required
Speed	20-30mm/s
Cooling	0-30%

Recommended settings for printers with a 0.4mm Nozzle. Max. 50% layerheight. Optimal print settings may vary between different printers and also depend on environmental factors.

NEED HELP?

If you have any question about the product and/or you are experiencing an issue, please contact us via support@extrudr.com





^{1.} Additional info in our regulatory, additional information and chemical resistance data sheets.

^{2.} Certifications depend on colors in final product. More info in the additional information sheet.