

Flex TPU (85A)

Key Features

Flexibility • Chemical resistance • UV resistance • Impact resistance • Extreme layer adhesion

Applications

Prototyping • End-use parts • Jigs and fixtures • Automotive • Electronics • Engineering • Consumer goods

Product Description

TPU FLEX Semisoft is a specially developed material for the FDM/FFF process, offering extensibility up to 550%, high chemical resistance, and heat distortion resistance up to 98°C. The material boasts high impact and breakage resistance, is halogen-free, and free of silicone, plasticizers, and oils. It has a Shore hardness of A85, is UV-resistant, and provides excellent layer adhesion.

Properties

Tensile modulus	42 MPa
Stress at break (50%, 100%)	9, 11 MPa
Elongation at break	550%
Melting temperature (20°C/min)	180 - 230°C
VICAT A (VST)	98°C*
Glass transition temperature	-34°C
Abrasion resistance	25 mm ³
Compressive strength	42 MPa
Density	1.18 g/cm ³
Hardness	85A - 88A

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

Reference

For more detailed source information, please consult the original document linked [here](#). We encourage users to verify the data's relevance and suitability for their specific needs.

