

Flex TPE

LASER SINTERING MATERIAL SPECIFICATIONS

Highlights

- Soft, white parts out of the machine
- Extreme elongations achievable without permanent deformation
- Easy to infiltrate to obtain maximum properties
- 100% recyclable

Applications

- Footwear prototyping
- Automotive gaskets and seals
- Cushioning applications
- Ideal for applications requiring softer parts with excellent ductility and surface finish.

TYPICAL PHYSICAL PROPERTIES

MECHANICAL PROPERTIES	TEST METHOD	ENGLISH	METRIC
Color/Appearance	Visual	White	White
Bulk Density	ASTM D1895	0.214 oz/in ³	0.37 g/cm ³
Elongation at Break	ASTM D638	110%	110%
Flexural Modulus (-40 C)	ASTM D790	3,336 psi	23 MPa
Flexural Modulus (23 C)	ASTM D790	1,885 psi	13 MPa
Flexural Modulus (100 C)	ASTM D790	435 psi	3 MPa
Initial Tear Resistance, Die C, 23 C	ASTM D624	7.4 lbf	33 N
Abrasion Resistance, Taber H-18 Wheel	ASTM D4060	0.012 oz	535 mg
Shore Hardness, Shore "A"	ASTM D2240	40	40
Tensile Modulus	ASTM D638	1,160 psi	8 MPa
Average Particle Size (D50)	Laser Diffraction	0.003 inches	85 microns
Particle Size Range (D10-D90)	Laser Diffraction	0.001 - 0.005 inches	20 - 130 microns
Sintered Part Density	ASTM D792	0.595 oz/in ³	1.03 g/cm ³

The information presented represents typical values intended for reference and comparison purposes only. It should not be used for design specifications or quality control purposes. End-use material performance can be impacted (+/-) by, but not limited to, part design, end-use conditions, test conditions, color etc. Actual values will vary with build conditions. Product specifications are subject to change without notice.

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