



DuraForm[®] TPU Elastomer

Thermoplastic elastomer material with rubber-like flexibility and functionality for use with sPro 60 HD-HS.

General Properties

MEASUREMENT	CONDITION	METRIC	U.S.
Sintered Part Density	Internal	0.78 g/cm ³	0.78 g/cm ³

Mechanical Properties

MEASUREMENT	CONDITION	METRIC	U.S.
Tensile Strength, Ultimate	D412	2.1 MPa	305 psi
Tensile Strength, Break	D638	2.0 MPa	290 psi
Tensile Modulus	D638	5.3 MPa	770 ksi
Elongation at Yield	D638	220 %	220 %
Elongation at Break	D412	200 %	200 %
Flexural Modulus	D790	6.0 MPa	856 psi
Hardness, Shore A	D2240	59.0	59
Initial Tear Resistance (Die C @ 23 °C)	D624	15.4 J/m	11.4 lb/ft
Abrasion Resistance Taber, CS-17 Wheel, 1 Kg Load	D4060	97.9 mg/1000 cycles	72.2 oz/1000 cycles

* All data generated using 3D Systems recommended recycle rates

Features

- Abrasion and tear resistant
- Vary shore A hardness without changing material
- Easy to process and easy to use
- Good powder recycle characteristics
- Excellent detail and surface finish

Benefits

- Abrasion resistance ideal for consumer goods (like shoe soles)
- Flexibility with excellent strength
- Difficult to tear or break
- Functional prototypes can be tested to see “real life” wear-and-tear results
- Excellent recovery memory

Applications

Consumer goods, flexible parts for industrial prints, functional prototypes and footwear, hoses and seals.



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