

Figure 4[™] ELAST-BLK 10

Design Elastomer

Figure 4

A rubber-like material for accelerated designing and prototyping of elastomeric products

DESIGN AND TEST ELASTOMERIC PARTS

Figure 4 ELAST-BLK 10 is a material suited for the prototyping and design of a wide variety of elastomeric parts. Producing parts in a fraction of the time required to produce molded parts, this material accelerates the design and iteration of new concepts with rubber-like functional prototypes for industrial and consumer goods applications.

Liquid Material

MEASUREMENT	CONDITION	VALUE	
Viscosity	@ 25 °C (71 °F)	1200 cps	
Color		Black	
Solid Density	@ 25 °C (77 °F)	1.13 g/cm ³	0.041 lb/in ³
Liquid Density	@ 25 °C (77 °F)	1.06 g/cm ³	0.038 lb/in ³
Package Volume		1 kg bottle - Figure 4 Standalone 10 kg container - Figure 4 Production	
Layer Thickness (Standard Mode)		0.10 mm	0.004 in
Vertical Build Speed (Standard Mode)		47 mm/hr	1.9 in/hr

APPLICATIONS

- Design verification and validation and testing of:
 - Hoses
 - Tubes
 - Weatherstripping
 - Seals
 - Grommets
 - Gaskets
 - Spacers and other vibration dampening components

BENEFITS

- Verify, modify and optimize designs of elastomeric parts prior to production
- Excellent shape recovery
- Realistic rubber look and feel

FEATURES

- Medium softness/stiffness
- High elongation at break
- Excellent compressive characteristics



3D SYSTEMS



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Post-Cured Material

MECHANICAL PROPERTIES				
MEASUREMENT	CONDITION	METRIC	U.S.	
Tensile Strength (MPa PSI)	ASTM D412	3.6	522	
Tensile Modulus (MPa KSI)	ASTM D412	3.6	0.522	
Elongation at Break	ASTM D412	83 %		
Tear Strength (kN/m Lbf/in)	ASTM D624	11	64	
Compression Set	ASTM D395	0.87 %		
Glass Transition (Tg)	DMA, E"	-26 °C	-16 °F	
Hardness, Shore	ASTM D2240	65A		
Water Absorption	ASTM D570	1.4 %		



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