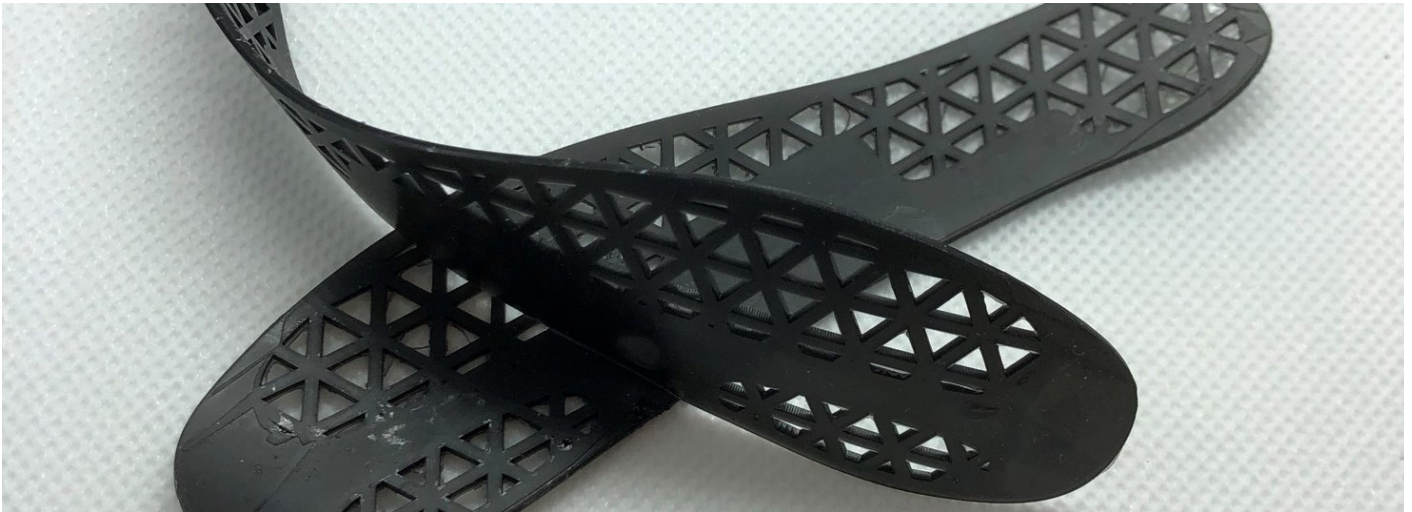


MATERIAL DATA SHEET



3DLite[®] PROTEUS SOFTBLACK

3D PRINT RESIN (DLP)

Flexible Elastomer Material

HIGH PERFORMANCE PHOTOPOLYMER

Founded in 1986, SDC Technologies, Inc. (SDC) is the global leader of premium coatings. SDC's established technical experience and capability in UV-cure materials gave birth to the development in DLP/SLA 3D printing material. Utilizing a state-of-the-art adaptive manufacturing scientific lab, SDC's team of experienced chemists and polymer engineers have developed a range of engineering/production grade photopolymer resins under the 3DLite[®] brand.

PREMIUM FUNCTIONAL RESINS

With more than 35 years of product innovation, SDC's proprietary technologies are trusted by the world's most prestigious brands. 3DLite resins were designed to enhance your production process by improving the quality of your products while reducing cost at the same time.

PRODUCT OVERVIEW

3DLite Proteus SoftBlack delivers best-in-class flexibility and softness with biocompatibility. Uniquely formulated for high performance applications where complex geometry and smooth surface finish is required. 3DLite Proteus SoftBlack, is an easy to print elastomer material that does not require a thermal post-cure.

PERFORMANCE FEATURES

- Flexible Elastomer that are production quality.
- Biocompatibility Certified for extended skin contact (ISO10994-3-5).
- Extremely smooth surface with minimal post processing
- Excellent product durability and stability.
- No additional thermal curing/post-processing required.

APPLICATIONS

- Cushioning and damping
- Handles, grips, over-molds
- Medical models and medical devices
- Special effects props and models
- Wearables and consumer goods prototyping

3DLite® PROTEUS SOFTBLACK

3DLite™ PROTEUS SOFTBLACK	METRIC	METHOD
Tensile Strength	3.3 MPa	ASTM D638
Tensile Modulus	1.6 GPa	ASTM D638
Elongation	205%	ASTM D638
Tear Strength	7.5 kN/m	ASTM D624-C
Shore A Hardness	65	ASTM D2240
Glass Transition Temperature	- 58°C	DSC
Compression set 72 hrs. @23°C	2.3%	ASTM D395-B
Compression set 73 hrs. @70°C	1.1%	ASTM D395-B
Rebound Resilience 16" Drop height	13%	ASTM D2632
Viscosity	3150 CPS @ 25°C	Brookfield viscometer @ 25 °C
Specific Gravity	1.03 g/cm ³	ASTM D792

1. Material properties can vary with part geometry, print orientation, print settings and temperature.
2. Data was obtained from parts printed using Form 2, 100 µm, Elastic 50A settings, washed in Form Wash for 20 minutes and post-cured with Form Cure at 60 °C for 20 minutes.

To the best of our knowledge the information contained herein is accurate. However, SDC Technologies, Inc. makes no warranty, expressed or implied, regarding the accuracy of these results to be obtained from the use thereof.

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