

# **Technical Data Sheet**

# **3DLite**<sup>®</sup> 312-RB Black

### DESCRIPTION

3DLite<sup>®</sup> 312-RB Black is a PP-like material with industry-leading mechanical performance, suitable for various applications including prototyping and lowvolume production. It demonstrates extremely smooth surface quality and exceptional precision.

# FEATURES

- Functional parts with reliable material properties mechanical strength and stability.
- Extremely smooth surface with minimal post processing.
- PP-like parts: look and feel of injection-molded parts.
- No additional thermal curing/ post-processing required.

# Robust Exceptional Smooth Surface 3D Print Resin (405 nm)

3DLite <sup>®</sup> 312-RB	METRIC	METHOD
Tensile Strength	43 MPa	ASTM D638
Tensile Modulus	2.7 GPa	ASTM D638
Elongation	12%	ASTM D638
Flexural Strength @ max. load	58 MPa	ISO 178
Flexural Modulus	1.8 GPa	ISO 178
IZOD Impact Strength (notched)	28 J/m	ASTM D256
Heat Deflection Temp @ 0.455 MPa	56 °C	ISO 75
Heat Deflection Temp @ 1.80 MPa	29 °C	ISO 75
Glass Transition Temperature	130 °C	DMA
Shore D Hardness	75	ASTM D2240
Viscosity	2200 cP	Brookfield viscometer @ 25°C
Specific Gravity	1.067 g/cm <sup>3</sup>	ASTM D792

1. Material properties can vary with part geometry, print orientation, print settings and temperature.

Data was obtained from parts printed using B9Creations B9 Core 550 (b9c.com), washed in IPA for 20
minutes and post-cured with B9 Model Cure at room temperature for 10 minutes on both sides of the
parts.

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.





# 3DLite<sup>®</sup> 312-RB Black

Robust 3D Print Resin (405 nm)

# **SDC TECHNOLOGIES CONTACT INFORMATION**

#### **Corporate Headquarters - USA**

45 Parker, Suite 100 Irvine, California 92618 USA 800-272-7681 (Toll-Free USA) +1-714-939-8300 technicalsupport.ca@sdctech.com

#### Europe Office

Unit 7, Avondale Industrial Estate Pontrhydyrun, Cwmbran NP44 1UG, Great Britain +44-1633-627030 technicalsupport.eu@sdctech.com

#### **China Office**

No. 1585 Gumei Road Xuhui District Shanghai 200233 China +86-21-61517768 customercare.cn@sdctech.com

#### **Singapore Office**

27 Tuas South Street 1 Singapore 638035 +65-6210-6355 customercare.ap@sdctech.com



# sdctech.com

3DLite® is registered trademark of SDC Technologies, Inc.

©2024 SDC Technologies, Inc. All rights reserved. SDC Technologies is a wholly-owned subsidiary of Mitsui Chemicals, Inc.

08.02.2022

# **STORAGE AND USE**

Store this material in closed, properly labeled containers. Do not store in colorless glass containers or other containers that transmit UV light. Do not pad containers or pressurized vessels using nitrogen. Use of nitrogen may cause premature gelling. Avoid sunlight and other sources of UV light. Store at ambient temperatures less than 75°F/24°C. When stored at this temperature in the original closed container, it is recommended to use this material within 12 months from date of manufacture. Keep away from ignition sources.

### **HEALTH AND SAFETY INFORMATION**

Before using this product, read and understand the Safety Data Sheet, SDS, which provides information on health, physical, and environmental hazards, handling precautions and first aid recommendations. For a copy of an SDS, contact a sales or customer service representative.

# WARRANTY AND LIABILITY LIMITATIONS

Information contained herein is accurate to the best of our knowledge. The material solution properties and cured material properties listed herein represent typical values for 312-RB Black and are not meant as specifications. SDC Technologies, Inc. insists that users conduct their own tests for applicability and fitness for any purpose. Statements concerning use of products or formulations described herein shall not be construed as a warranty or license to infringe any patent or trademark, and no liability for infringement arising out of such use is assumed. Please refer to SDC Technologies' Standard Terms and Conditions or to your Purchase Agreement with SDC for the warranty coverage of SDC's product.

# PRODUCT SHIPPING AND AVAILABILITY

Typical lead-time for shipment is four (4) weeks from confirmation of a purchase order. SDC provides several shipping options. Please contact an SDC representative to determine which option best fits your needs.

ISO 9001:2015 and ISO 14001:2015 Certified

