



## BLUEprint DATA SHEET

Hard General Engineering Resin for prototyping and functional 3D Printing

### Description:

BLUEprint exhibits a clean, smooth print with low shrink, medium-high tensile strength, solvent resistance and high shore hardness.

**Color:** Opaque Cyan. BLUEprint is available in Custom colors upon request.

### Technical Data:

<b>Shore D Hardness</b>	<b>81</b>
<b>UV Absorption</b>	<b>405nm</b>
<b>Exposure @ .05mm</b>	<b>12s</b>
<b>Uncured Density</b>	<b>1.11 (g/ml)</b>
<b>Cured Density</b>	<b>1.19 (g/ml)</b>
<b>Shrinkage</b>	<b>6.7%</b>
*Post cured for 30min @ 50°C	
<b>Shrinkage</b>	<b>3.3%</b>
*Post cured for 15min @ 50°C	
<b>Viscosity (25°C)</b>	<b>653 mPa*s</b>
<b>Elastic modulus</b>	<b>281,250 (psi)</b>
<b>Tensile Strength</b>	<b>6,645 (psi)</b>
<b>Elongation</b>	<b>6.5%</b>
*Tested according to ASTM D638 specifications and bones, 50 mm/min, Type IV	
<b>Shelf Life minimum 1 year unopened</b>	

### BLUEprint Solvent Compatibility

Percent weight gain over 24 hours for printed and post-cured 1x1x1 cm cube immersed in respective solvent:

<b>Material</b>	<b>24 hr weight gain (%)</b>
<b>Acetone</b>	8.8
<b>Isopropyl Alcohol</b>	.62
<b>Bleach (5% NaOCl)</b>	.42
<b>Butyl Acetate</b>	1.04
<b>Hydrolic Oil</b>	0
<b>Hydrogen Peroxide (3%)</b>	.42
<b>Mineral Oil, light</b>	.31
<b>Mineral Oil, Heavy</b>	.21
<b>Salt Water (3.5%)</b>	.8
<b>Sodium Hydroxide (.025%)</b>	0
<b>Water</b>	.78
<b>Xylene</b>	.31

3D Resin Solutions is a manufacturer of custom resin for specific applications.

Contact us for information on development work, custom colors, bulk ordering, or specific applications.

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