

## Data Sheet SKU: DLPCG2-16

## MPT-Flex - Thermally Curable mSLA 3D Printing Resin

Flexible, high tear strength, formable, tough 3D resin for multi-purpose 3D printing, high detail retention. Non Cytotoxic when fully thermal cured based on 3rd party testing after (1) hour at 275\*F post cure

**Grade:** Industrial

**Appearance:** Grey Liquid **Odor:** Mild Acrylate Odor

General Data		
UV Absorption	365, 405nm	
Uncured Density	1.11 (g/ml)	
Viscosity (25°C)	200 mPa*s	
Shore D Hardness	70-73	
Linear Shrink	<2%	
Post Cure: 10 Minute	es 405nm light box (no heat)	
Elastic modulus	60,000 (psi)	
Tensile Strength	1,600 (psi)	
Elongation	20-23%	
Work (j)	3	
Post Cure	: 250*F for 1 Hour	
Post Cure Elastic Modulus	: <b>250*F for 1 Hour</b> 85,000 (psi)	
Elastic Modulus	85,000 (psi)	
Elastic Modulus Tensile Strength	85,000 (psi) 2,000 (psi)	
Elastic Modulus Tensile Strength Elongation	85,000 (psi) 2,000 (psi) 27-30%	
Elastic Modulus Tensile Strength Elongation Work (j)	85,000 (psi) 2,000 (psi) 27-30%	
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## **Solvent Compatibility**

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

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Material	24 hr weight gain (%)
Acetone	36.27
Isopropyl Alcohol	4.85
Bleach (5% NaOCI)	0
Butyl Acetate	0.97
Hydrolic Oil	0
Hyrdogen Peroxide (3%)	0.97
Mineral Oil, light	0
Mineral Oil, Heavy	0
Caustic Soda (50%)	0
Water	0.98
Xylene	13.73%
Glacial Acetic Acid (99.5%)	Dissolved

Note: Product or application recommendations given by representatives of 3D Resin Solutions are for the purpose of aiding our customers to achieve their desired results. There are no warranties expressed or implied. In no event shall 3D Resin Solutions be held liable for any loss of profits or any indirect, incidental, special, exemplary, punitive, or consequential damages sustained or incurred in connection with the use of our products or application recommendations. <u>Full-Scale</u> Testing of the end-use product and product performance are the user's responsibility. All risks are assumed by the end-user.

Do not print products for any person or pet who may chew on or otherwise orally ingest the product. Read and understand all safety information before handling liquid photo polymer.

3D Resin Solutions is a design and manufacturer of custom 3d photopolymer based in the United States. Contact us for information on development work, bulk ordering, or specific applications.

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