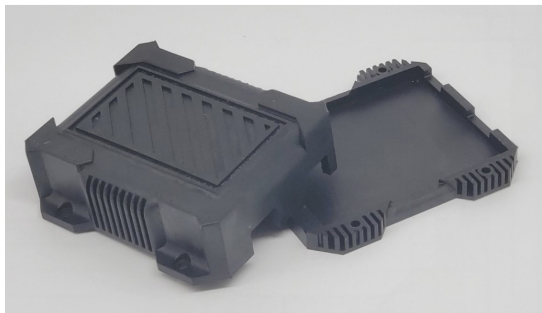
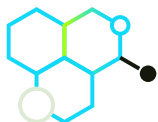


### Formula – Photopolymer Resin Powered by Mech<sup>T</sup> for Isotropic Static-Dissipative Performance



Formula1 by Mechnano is a black, rigid, static-dissipative photopolymer resin. Formula1 uses a urethane dimethacrylate base that includes a stable dispersion of discrete functionalized carbon nanotubes (Mech<sup>T</sup>) to achieve consistent static dissipative properties. Mech<sup>T</sup> does not settle in Formula1 resin, resulting in consistent EDS-capable parts. The discrete nature of Mech<sup>T</sup> also produces parts that leave no carbon trails and improves key mechanical properties such as Tensile Strength, Modulus, and Impact Resistance. Formula1 is designed for vat photopolymerization additive manufacturing methods and allows for high resolution part fabrication with isotropic static dissipative and mechanical properties.



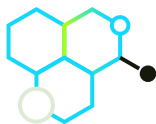
### Part Properties

PROPERTIES	UNITS	METHOD	POST-CURED <sup>1</sup>
<b>Mechanical Properties</b>			
Tensile Strength	MPa	ASTM D 638-14	105.2
Tensile Modulus	GPa	ASTM D 638-14	3.6
Yield Strength (offset 0.2%)	MPa	ASTM D 638-14	76.4
Elongation at Break	%	ASTM D 638-14	3.8
<b>Flexural Properties</b>			
Flexural Strength	MPa	ASTM D 790-15*	130.6
Flexural Modulus	GPa	ASTM D 790-15*	3.4
<b>Impact Properties</b>			
Notched IZOD	J/m	ASTM D 256-10	23
<b>Hardness</b>			
Shore "D"		ASTM D 2240-15	89
<b>Thermal Properties</b>			
Heat Deflection @0.45MPa	°C	ASTM D 648-16	91
Heat Deflection @01.8MPa	°C	ASTM D 648-16	91
<b>Electrical Properties</b>			
Surface Resistance	Ω	ASTM D257	10 <sup>7</sup>
<b>Water Absorption</b>			
	%	ASTM D 570-98	0.90%
<b>Density (@ 25°C)</b>			
	g/cm <sup>3</sup>		1.1
<b>Viscosity (@ 25°C)</b>			
	cps		878

Notes:

<sup>1</sup>Post cured at UV 120 min at 60°

\*Specimens did not yield or break within the 5% strain limit when tested by Procedure A, the increased strain was applied (Procedure B) to induce yield and/or break within the required 5% strain limit

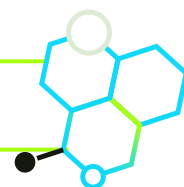


### Resin Properties

PROPERTIES	UNITS	CONDITION	VALUE
Color			Black
Density	g/cm <sup>3</sup>	25°C	1.1
Viscosity	cps	25°C	878.1

*Disclaimer: The data contained in this document is based on our current knowledge and experience. The performance of the product may vary with processing conditions, operating conditions, application, or with end use. Mechnano, LLC makes no warranties, expressed or implied, regarding the accuracy of these results with regards to system or end application*

We Are **Exponentially Improving** Additive Manufacturing Materials



**Mechnano** is an Arizona-based startup of scientists and entrepreneurs who have spent the past several years applying proprietary CNT technology to AM polymers. Mech<sup>T</sup> unleashes CNT potential in AM materials to achieve extraordinary performance.

Whether you are ready to purchase Mechnano's ESD resin or if you have questions about our technology and applications, **let's start the conversation.**

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