

# Edgetek<sup>™</sup> MLS-1000 Polycarbonate + PSU

## **Key Characteristics**

#### Product Description

The Edgetek® Engineering Thermoplastic Compounds portfolio covers a broad range of standard and custom-formulated high performance materials. This portfolio includes high-temperature materials for elevated service temperature environments, high-modulus / structural materials for load-bearing and high-strength applications and flame-retardant products. These compounds are based on select engineering thermoplastic resins that are compounded with reinforcing additives such as carbon fiber, glass fiber and glass beads.

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Material Status	Commercial: Active		
Regional Availability	Africa & Middle East     Asia Pacific	<ul><li>Europe</li><li>North America</li></ul>	South America
Features	General Purpose	<ul> <li>Heat Resistance, High</li> </ul>	
Uses	<ul> <li>Automotive Applications</li> <li>Consumer Applications</li> </ul>	<ul> <li>General Purpose</li> <li>Industrial Applications</li> </ul>	
Forms	Pellets		
Processing Method	<ul> <li>Injection Molding</li> </ul>		

# **Technical Properties**<sup>1</sup>

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Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Specific Gravity	1.23	1.23	ASTM D792
Molding Shrink (Flow)	0.60 to 0.70 %	0.60 to 0.70 %	ASTM D955
Water Absorption (24 hr, 0.125 in (3.18 mm))	0.020 %	0.020 %	ASTM D570
lechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus <sup>2</sup>	350000 psi	2410 MPa	ASTM D638
Tensile Strength <sup>2</sup> (Yield)	9500 psi	65.5 MPa	ASTM D638
Tensile Elongation <sup>2</sup> (Break)	20 to 22 %	20 to 22 %	ASTM D638
Flexural Modulus	350000 psi	2410 MPa	ASTM D790
Flexural Strength	14000 psi	96.5 MPa	ASTM D790
npact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact			ASTM D256A
73 °F (23 °C), 0.125 in (3.18 mm), Injection Molded	1.60 ft·lb/in	85.4 J/m	

#### **Processing Information**

Injection	Nominal Value (English)	Nominal Value (SI)
Processing (Melt) Temp	630 to 660 °F	332 to 349 °C

#### Notes

<sup>1</sup> Typical values are not to be construed as specifications.

<sup>2</sup> Type I, 0.20 in/min (5.1 mm/min)

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## Edgetek™ MLS-1000

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