

MATERIAL PROPERTIES

Product Description

LL 8460 is a linear low density hexene copolymer designed to offer excellent ESCR and toughness. This resin is ideally suited for applications that require the optimum balance of processability, stiffness and low temperature toughness.

Resin Properties	Typical Value	Typical Value (SI)	Test Based On
Density	0.938 g/cm ³	0.938 g/cm ³	ASTM D1505
Melt Index (190°C/2.16 kg)	3.3 g/10 min	3.3 g/10 min	ASTM D1238
Thermal	Typical Value	Typical Value (SI)	Test Based On
Deflection Temperature Under Load (DTUL) at 66psi - Unannealed	129 °F	54 °C	ASTM D648
Deflection Temperature Under Load (DTUL) at 264psi - Unannealed	100 °F	38 °C	ASTM D648
Peak Melting Temperature	259 °F	126 °C	ASTM D3418
Molded Properties	Typical Value	Typical Value (SI)	Test Based On
Tensile Strength at Yield 2.0 in/min [50 mm/min]	2500 psi	17 MPa	ASTM D638
Elongation at Yield (2.0 in/min [50 mm/min])	10 %	10 %	ASTM D638
Flexural Modulus - 1% Secant	93000 psi	640 MPa	ASTM D790B
Environmental Stress-Crack Resistance 10% Igepal, F50 100% Igepal, F50	60 hr > 1000 hr	60 hr > 1000 hr	ASTM D1693A
Impact	Typical Value	Typical Value (SI)	Test Based On
Impact Strength			ARM
-40°F [-40°C], 0.125 in [3.18 mm]	64 ft·lb	87 J	
-40°F [-40°C], 0.250 in [6.35 mm]	190 ft·lb	258 J	

Additional Information

- All physical properties were measured on 3 mm rotomolded samples unless a different value is shown, except for ESCR, which was measured on compression molded samples.
- Tensile testing was conducted at a crosshead speed of 50 mm/min. The tensile strength reported refers to the maximum stress reached during the test.
- Test procedures may be modified to accommodate operating conditions or facility limitations.