



## PLUSE EXT 100

### Engineering Resin

PULSE\* EXT 100 engineering resin has been designed to provide excellent processability, high heat resistance, and high impact strength at both room and low temperatures.

PULSE EXT 100 engineering resin has been used in automotive exterior trim applications.

Properties <sup>(1)</sup>	English	S.I.	
Typical Physical	Test Method		
Property, Unit of measure			
Specific Gravity	ASTM D 792	1.14	1.14
Melt Flow Rate (230°C/3.8 kg)	ASTM D 1238	1.25 g/10 min	1.25 g/10 min
Mold Shrink, Linear-Flow	ASTM D 955	0.006 in/in	6.0 mm/mm
<b>Mechanical</b>			
Tensile Strength @ Yield	ASTM D 638 <sup>2</sup>	7500 psi	51.7 MPa
Tensile Elongation @ Break	ASTM D 638 <sup>2</sup>	80%	80%
Flexural Modulus	ASTM D 790	325,000 psi	2240 MPa
Flexural Strength @ Yield	ASTM D 790	12,000 psi	82.7 MPa
<b>Impact</b>			
Notched Izod Impact			
73°F, 0.1250 in (23°C, 3.18 mm)		12 ft-lb/in	641 J/m
-20°F, 0.1250 in (-29°C, 3.18 mm)	ASTM D 256 <sup>3</sup>	9 ft-lb/in	480 J/m
Instrumented Dart Impact Energy- Total Energy			
73°F, 0.1250 in (23°C, 3.18 mm)		480 in-lb	54.2 J
-20°F, 0.1250 in (-29°C, 3.18 mm)	ASTM D 256 <sup>3</sup>	530 ft-lb/in	59.9 J
<b>Thermal</b>			
DTUL @ 264 psi (1.8 MPa), unannealed 0.1250 in (3.18 mm)	ASTM D 648	225°F	107°C
DTUL @ 66 psi (0.45 MPa), unannealed 0.1250 in (3.18 mm)	ASTM D 648	256°F	124°C
<b>Mold Filling Analysis Parameters</b>			
Melt Density		1.02 g/cm <sup>3</sup>	1.02 g/cm <sup>3</sup>
Melt Specific Heat	ASTM C 351	0.473 Btu/lb/°F	1980 J/kg°C
Melt Thermal Conductivity	ASTM C 177	1.8039 Btu-in/hr/ft <sup>2</sup> /°F	0.26 W/m/K
No Flow Temperature		320°F	160°C
Ejection Temperature		280°F	138°C

1 Typical properties; not to be construed as specifications.

2 Type I, 0.05 in/min (50 mm/min)

3 10.0 mil notch (0.25mm)

4 8000 in/min (200 m/min)

