PULSE™ EXT 100
PC/ABS Engineering Resin

Overview

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

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

Applications:

- Front Grilles
- Wheel Covers and Center Caps
- Decorative Trim
- Name Plates and Badges

Automotive Specifications

- CHRYSLER MS-DB-195 CPN2967
- CHRYSLER MS-DB-195 CPN3094
- CHRYSLER MS-DB-195 CPN3159
- GM GMP.ABS+PC.010
- TOYOTA TSM 5526G-1

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	1.14	g/cm³	1.14	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	1.3	g/10 min	1.3	g/10 min	ASTM D1238
Molding Shrinkage - Flow	6.0E-3	in/in	0.60	%	ASTM D955
Mechanical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Tensile Strength [1] (Yield)	7500	psi	51.7	MPa	ASTM D638
Tensile Elongation [1] (Break)	80	%	80	%	ASTM D638
Flexural Modulus	325000	psi	2240	MPa	ASTM D790
Flexural Strength (Yield)	12000	psi	82.7	MPa	ASTM D790
Impact	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Notched Izod Impact [2]					ASTM D256
-20°F (-29°C), 0.126 in (3.20 mm)	9.0	ft·lb/in	480	J/m	
73°F (23°C), 0.126 in (3.20 mm)	12	ft·lb/in	640	J/m	
Instrumented Dart Impact [3]					ASTM D3763
-20°F (-29°C), 0.126 in (3.20 mm), Total Energy	530	in·lb	59.9	J	
73°F (23°C), 0.126 in (3.20 mm), Total Energy	480	in·lb	54.2	J	
Thermal	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Deflection Temperature Under Load					ASTM D648
66 psi (0.45 MPa), Unannealed, 0.126 in (3.20 mm)	256	°F	124	°C	
264 psi (1.8 MPa), Unannealed, 0.126 in (3.20 mm)	225	°F	107	°C	
CLTE - Flow (-40 to 180°F (-40 to 82°C))	4.0E-5	in/in/°F	7.2E-5	cm/cm/°C	ASTM D696
Fill Analysis	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Melt Density	1.02	g/cm³	1.02	g/cm³	
Melt Specific Heat	0.473	Btu/lb/°F	1980	J/kg/°C	ASTM C351
Melt Thermal Conductivity	1.8	Btu·in/hr/ft²/°F	0.26	W/m/K	ASTM C177
No Flow Temperature	320	°F	160	°C	
Ejection Temperature	280	°F	138	°C	

Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

[1] Type I, 2.0 in/min (51 mm/min)

[2] 10 mil (0.25 mm) Notch Depth

[3] 11.1 ft/sec (3.39 m/sec)

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