

Technical Information



PULSE™ XT50

PC/ABS Engineering Resin

Overview

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PULSE™ XT50 is a very easy flow, medium-heat, high gloss and low density PC/ABS resin delivering optimized performance for automotive exterior component applications.

Benefits

- High gloss and meeting exterior paintability requirements
- Low density driving to lighter and cost optimized parts
- Very easy flow, reduced scrap, and faster cycle times, while enabling thin wall part design for mass reduction
- Heat resistance optimized for the majority of automotive exterior applications

Applications

- Spoilers
- Side mirrors
- Front grills
- Exterior trims

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.10 g/cm ³	1.10 g/cm ³	ISO 1183
Apparent (Bulk) Density	0.63 g/cm ³	0.63 g/cm ³	ISO 60
Melt Mass-Flow Rate (MFR) (260°C/5.0 kg)	25 g/10 min	25 g/10 min	ISO 1133
Spiral Flow ^{1, 2}	24.8 in	63.0 cm	
Molding Shrinkage	4.0E-3 to 7.0E-3 in/in	0.40 to 0.70 %	ISO 294-4
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	334000 psi	2300 MPa	ISO 527-1/1
Tensile Stress (Yield)	6820 psi	47.0 MPa	ISO 527-2/50
Tensile Strain (Break)	50 %	50 %	ISO 527-2/50
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	12 ft·lb/in ²	25 kJ/m ²	
73°F (23°C)	24 ft·lb/in ²	50 kJ/m ²	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ISO 75-2/A
264 psi (1.8 MPa), Unannealed	201 °F	94.0 °C	
Vicat Softening Temperature	232 °F	111 °C	ISO 306/B50
CLTE - Flow (-22 to 176°F (-30 to 80°C))	4.2E-5 to 4.4E-5 in/in/°F	7.5E-5 to 8.0E-5 cm/cm/°C	ISO 11359-2
Injection	Nominal Value (English)	Nominal Value (SI)	
Drying Temperature	212 °F	100 °C	
Drying Time	4.0 hr	4.0 hr	
Processing (Melt) Temp	491 to 536 °F	255 to 280 °C	
Mold Temperature	140 to 176 °F	60 to 80 °C	

Notes

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

¹ Melt Temperature: 500°F (260°C), Injection Pressure: 2.61E+4 psi (1.80E+3 bar)

² 2 mm thickness

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