

Technical Information



PULSE™ B-270

PC/ABS Engineering Resin

Overview

PULSE™ B-270 engineering resin has been designed to provide excellent exterior impact strength at low temperatures.

Benefits:

- High Gloss for exterior paint applications
- High-impact strength even at low temperature
- High temperature stability
- Low CLTE

Applications:

- Exterior Door Panels
- Exterior Decorative Trim

Automotive Specifications

- CHRYSLER MS-DB-206 CPN 4695
- CHRYSLER MS-DB-300 CPN4695
- FORD WSS-M4D813-B1
- FORD WSS-M4D813-B2
- GM GMW15582P-ABS+PC-T3

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.20 g/cm ³	1.20 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	1.5 g/10 min	1.5 g/10 min	ASTM D1238
Molding Shrinkage - Flow	6.5E-3 in/in	0.65 %	ASTM D955
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	406000 psi	2800 MPa	ISO 527-1/1
Tensile Strength			
Yield ¹	8690 psi	59.9 MPa	ASTM D638
Yield	8120 psi	56.0 MPa	ISO 527-2/50
Tensile Strain			
Yield	4.0 %	4.0 %	ISO 527-2/50
Break ¹	100 %	100 %	ASTM D638
Flexural Modulus			
-- ²	435000 psi	3000 MPa	ASTM D790
-- ³	435000 psi	3000 MPa	ISO 178
Flexural Strength ²	14500 psi	100 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	6.7 ft-lb/in ²	14 kJ/m ²	
73°F (23°C)	19 ft-lb/in ²	40 kJ/m ²	
Notched Izod Impact			ASTM D256
-20°F (-29°C)	2.0 ft-lb/in	110 J/m	
73°F (23°C)	7.0 ft-lb/in	370 J/m	
Instrumented Dart Impact			ASTM D3763
-20°F (-29°C), 0.126 in (3.20 mm), Total Energy	500 in-lb	56.5 J	
73°F (23°C), 0.126 in (3.20 mm), Total Energy	500 in-lb	56.5 J	

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 psi (0.45 MPa), Unannealed	273 °F	134 °C	ASTM D648
66 psi (0.45 MPa), Unannealed	266 °F	130 °C	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	235 °F	113 °C	ISO 75-2/A
Vicat Softening Temperature	275 °F	135 °C	ISO 306/B50
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 554 °F	255 to 290 °C	
Mold Temperature	158 to 194 °F	70 to 90 °C	

Notes

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

¹ 2.0 in/min (50 mm/min)

² 0.051 in/min (1.3 mm/min)

³ 0.079 in/min (2.0 mm/min)

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