

Technical Information



PULSE™ 6000 BG PC/ABS Engineering Resin

Overview

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PULSE™ 6000 BG is a PC/ABS resin offering an interesting combination of heat resistance, low temperature impact and high melt strength specifically suitable for blow molded parts.

Benefits

- Heat ageing characteristics
- Low temperature impact performance
- High melt strength. Its low MFR enables manufacturing of complex blow molding parts.

Applications

- Blow Molded Seat Backs
- Knee bolsters
- Blow Moulded Spoilers.

Automotive Specifications

- VAG VW-TL 52231 A
- VOLKSWAGEN TL 522 31-A

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.14 g/cm ³	1.14 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (260°C/5.0 kg)	5.0 g/10 min	5.0 g/10 min	ISO 1133
Spiral Flow ¹	12.6 in	32.0 cm	
Molding Shrinkage			
Flow	4.0E-3 to 7.0E-3 in/in	0.40 to 0.70 %	ASTM D955
--	4.0E-3 to 7.0E-3 in/in	0.40 to 0.70 %	ISO 294-4
VOC Content	15.0 µg/g	15.0 µg/g	VDA 277
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus			
-- ²	313000 psi	2160 MPa	ASTM D638
--	312000 psi	2150 MPa	ISO 527-1/1
Tensile Stress (Yield)	7250 psi	50.0 MPa	ISO 527-2/50
Tensile Elongation			
Yield ³	5.0 %	5.0 %	ASTM D638
Break	> 80 %	> 80 %	ISO 527-2/50
Flexural Modulus ^{4, 5}	312000 psi	2150 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	26 ft·lb/in ²	55 kJ/m ²	
73°F (23°C)	29 ft·lb/in ²	60 kJ/m ²	
Notched Izod Impact			ASTM D256
-40°F (-40°C)	12 ft·lb/in	640 J/m	
73°F (23°C)	14 ft·lb/in	750 J/m	

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
264 psi (1.8 MPa), Unannealed	232 °F	111 °C	ASTM D648
264 psi (1.8 MPa), Unannealed	226 °F	108 °C	ISO 75-2/A
Vicat Softening Temperature	266 °F	130 °C	ISO 306/B50
CLTE - Flow			
-40 to 176°F (-40 to 80°C)	4.1E-5 in/in/°F	7.4E-5 cm/cm/°C	ASTM D696
-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 0.039 in/min (1.0 mm/min)

³ 2.0 in/min (50 mm/min)

⁴ 0.079 in/min (2.0 mm/min)

⁵ 3 points

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