

PULSE™ 6000 BG PC/ABS Engineering Resin

Overview

PULSE™ 6000 BG is a PC/ABS resin offering an interesting combination of heat ageing characteristics, low temperature impact performance and high melt strength. Its low MFR enables manufacturing of complex blow molding parts.

Typical applications for this product are Blow Molded Spoilers, knee bolsters and Seat Backs.

Automotive Specifications

- VOLKSWAGEN TL 522 31-A

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.13 g/cm ³	1.13 g/cm ³	ASTM D792 ISO 1183
Melt Mass-Flow Rate (MFR) (260°C/5.0 kg)	6.0 g/10 min	6.0 g/10 min	ASTM D1238 ISO 1133
Molding Shrinkage - Flow	4.0E-3 to 7.0E-3 in/in	0.40 to 0.70 %	ASTM D955
Water Absorption (24 hr, 73°F (23°C))	0.53 %	0.53 %	ASTM D570
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus			
--	313000 psi	2160 MPa	ASTM D638
--	330000 psi	2280 MPa	ISO 527-2
Tensile Strength			
Yield	7400 psi	51.0 MPa	ASTM D638
Yield	7830 psi	54.0 MPa	ISO 527-2
Break	7900 psi	54.5 MPa	ASTM D638
Break	7690 psi	53.0 MPa	ISO 527-2
Tensile Elongation			ASTM D638 ISO 527-2
Yield	5.0 %	5.0 %	
Break	> 80 %	> 80 %	
Flexural Modulus ^{1,2}	348000 psi	2400 MPa	ISO 178
Flexural Stress ^{1,2}	9860 psi	68.0 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179
-40°F (-40°C)	24 ft·lb/in ²	50 kJ/m ²	
73°F (23°C)	29 ft·lb/in ²	61 kJ/m ²	
Notched Izod Impact			
-40°F (-40°C)	12 ft·lb/in	640 J/m	ASTM D256
73°F (23°C)	14 ft·lb/in	750 J/m	ASTM D256
-40°F (-40°C)	29 ft·lb/in ²	61 kJ/m ²	ISO 180/4A
73°F (23°C)	33 ft·lb/in ²	69 kJ/m ²	ISO 180/4A
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	230 °F	110 °C	ISO 75-2/A
Vicat Softening Temperature			
--	291 °F	144 °C	ISO 306/A120
--	266 °F	130 °C	ISO 306/B50
CLTE - Flow (-40 to 180°F (-40 to 82°C))	4.1E-5 in/in/°F	7.4E-5 cm/cm/°C	ASTM D696