

PULSE™ 630GF PC/ABS Engineering Resin

Overview

PULSE™ 630GF is a 13% glass filled PC/ABS resin, available in standard black. It combines very high stiffness, low CLTE, excellent processability, good foam adhesion and long term heat stability. Its thermal resistance allows parts to meet the most severe sunload and temperature conditions in car interiors. The resin also allows for excellent post operations like stamping, transportation and stacking. Scrap generation during post processing is significantly below the levels obtained with glass filled SMA. To ensure low carbon emission characteristics and high thermal stability this product is based on the Company's unique mass ABS technology.

PULSE™ 630GF is especially suitable for instrument panel retainers which are to be foamed, air ducts etc.

Automotive Specifications

- BMW GS 93016
- DAIMLER DBL 5404.32

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.17 g/cm ³	1.17 g/cm ³	ISO 1183/B
Apparent (Bulk) Density	0.68 g/cm ³	0.68 g/cm ³	ISO 60
Melt Mass-Flow Rate (MFR) (260°C/5.0 kg)	19 g/10 min	19 g/10 min	ISO 1133
Molding Shrinkage	3.0E-3 to 5.0E-3 in/in	0.30 to 0.50 %	ISO 294-4
VOC Content	10.0 µg/g	10.0 µg/g	VDA 277
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	682000 psi	4700 MPa	ISO 527-2/1
Tensile Stress (Yield)	11900 psi	82.0 MPa	ISO 527-2/50
Tensile Strain (Break)	2.5 %	2.5 %	ISO 527-2/50
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	2.4 ft-lb/in ²	5.0 kJ/m ²	
73°F (23°C)	3.8 ft-lb/in ²	8.0 kJ/m ²	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Heat Deflection Temperature			ISO 75-2/A
264 psi (1.8 MPa), Unannealed	235 °F	113 °C	
Vicat Softening Temperature	241 °F	116 °C	ISO 306 ¹
CLTE - Flow (-22 to 176°F (-30 to 80°C))	2.7E-5 in/in/°F	4.8E-5 cm/cm/°C	ISO 11359-2
Injection	Nominal Value (English)	Nominal Value (SI)	
Drying Temperature	212 °F	100 °C	
Processing (Melt) Temp	500 to 554 °F	260 to 290 °C	
Mold Temperature	158 to 194 °F	70 to 90 °C	