

Technical Information



PULSE™ GX50

PC/ABS Engineering Resin

Overview

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PULSE™ GX50 is an easy flow, medium-heat, low gloss and low density PC/ABS resin delivering optimized performance for automotive interior component applications.

Benefits

- Low gloss allowing paint-less visible applications
- Low density driving to lighter and cost optimized parts
- Easy flow, reduced scrap, and faster cycle times, while enabling thin wall part design for mass reduction
- High-impact strength even at low temperature
- Heat resistance optimized for the majority of automotive interior components
- Consistent natural white color produces high quality part appearance when used with color concentrates (self coloring) or Trinseo Color Masterbatch Technology
- Low odor & VOC to meet all global Automotive OEM specifications

Applications

- Mid (floor)consoles
- Lower Instrument Panel components
- Door panel trim
- Pillars
- Storage / load floors / glove box

Automotive Specifications

- BMW GS 93016
- GM GMW15581P-ABS+PC-T1
- HONDA HSM-C4-G (EU)
- JLR STJLR.51.5229
- PSA Peugeot-Citroën FTM 62 0008
- VOLKSWAGEN TL 522 31
- DAIMLER DBL 5404.83
- GM GMW15581P-ABS+PC-T4
- JLR STJLR.51.353
- JLR STJLR.51.5262
- TESLA TM-1003 10/20
- VOLVO STD 1212,86

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.09 g/cm ³	1.09 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)	12 g/10 min	12 g/10 min	ISO 1133
Spiral Flow ¹	19.7 in	50.0 cm	
Molding Shrinkage	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	290000 psi	2000 MPa	ISO 527-1/1
Tensile Stress (Yield)	6380 psi	44.0 MPa	ISO 527-2/50
Tensile Strain (Break)	80 %	80 %	ISO 527-2/50
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	24 ft-lb/in ²	50 kJ/m ²	
73°F (23°C)	29 ft-lb/in ²	60 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	194 °F	90.0 °C	
Vicat Softening Temperature	225 °F	107 °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)

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