

Developmental DTF1600.00 Experimental Impact Copolymer Resin

Overview

Talc filled, high impact PP Compound. DTF1600.00 combines good balance between stiffness and impact performance with excellent process ability.

DTF1600.00 can be delivered in two versions:

- ESU: pre-colored and UV stabilized
- S: for covered automotive applications processed by back injection or extrusion moulding.

Applications:

- Door panels
- Door liners
- Pillar covers

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.02 g/cm ³	1.02 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	27 g/10 min	27 g/10 min	ISO 1133
Molding Shrinkage	8.0E-3 to 0.011 in/in	0.80 to 1.1 %	ISO 294-4
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	268000 psi	1850 MPa	ISO 527-1/1
Tensile Stress (Yield)	3190 psi	22.0 MPa	ISO 527-2/50
Tensile Strain (Break)	70 %	70 %	ISO 527-2/50
Flexural Modulus	268000 psi	1850 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
32°F (0°C)	2.4 ft-lb/in ²	5.1 kJ/m ²	
73°F (23°C)	12 ft-lb/in ²	26 kJ/m ²	
Multi-Axial Instrumented Impact Energy			ISO 6603-2
32°F (0°C), 0.118 in (3.00 mm), Ductile Failure	42.8 ft-lb	58.0 J	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ISO 75-2/B
66 psi (0.45 MPa), Unannealed	221 °F	105 °C	
Vicat Softening Temperature	280 °F	138 °C	ISO 306/A120
Injection	Nominal Value (English)	Nominal Value (SI)	
Drying Temperature	176 °F	80 °C	
Drying Time	2.0 hr	2.0 hr	
Processing (Melt) Temp	374 to 464 °F	190 to 240 °C	
Mold Temperature	68 to 140 °F	20 to 60 °C	