

INSPIRE™ TF1311 SC

Performance Polymers

Overview

INSPIRE* TF1311 SC is a natural 16% talc filled high impact PP. It has been developed for self-coloring (SC) in combination with the PP CCUVE 4% combi-masterbatches. This material combination, called INSPIRE* TF1311 ESU, is suitable for highly demanding aesthetic automotive applications, with superior scratch resistance and UV light stabilization.

Applications:

- Instrument panel retainer
- Instrument panel trim
- Mid console
- Door panels
- Door pockets
- Interior trim
- Trunk trim

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)	9.5 g/10 min	9.5 g/10 min	ISO 1133
Molding Shrinkage	9.0E-3 to 0.012 in/in	0.90 to 1.2 %	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	283000 psi	1950 MPa	ISO 527-2/1
Tensile Stress (Yield)	2900 psi	20.0 MPa	ISO 527-2/50
Tensile Strain (Break)	70 %	70 %	ISO 527-2/50
Flexural Modulus ^{1, 2}	268000 psi	1850 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact Strength			ISO 180/1A
32°F (0°C)	3.8 ft·lb/in ²	8.0 kJ/m ²	
73°F (23°C)	7.1 ft·lb/in ²	15 kJ/m ²	
Multi-Axial Instrumented Impact Energy			ISO 6603-2
73°F (23°C), Energy to Break, Ductile Failure	51.6 ft·lb	70.0 J	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Heat Deflection Temperature			
66 psi (0.45 MPa), Unannealed	230 °F	110 °C	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	136 °F	58.0 °C	ISO 75-2/A
Vicat Softening Temperature	275 °F	135 °C	ISO 306/A120
CLTE - Flow	4.7E-5 in/in/°F	8.5E-5 cm/cm/°C	ASTM D696

Additional Information

The information and data contained herein is specific to the natural (neat) product. For properties of the material in combination with PROMATCH* combi-masterbatches please refer to the technical data sheet for INSPIRE* TF1311 ESU.

Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

¹ 0.079 in/min (2.0 mm/min)

² 3 point load



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