Technical Data Sheet

RONFALIN® ABS 1413 GB 20

Acrylonitrile Butadiene Styrene
Engineering Plastics

Product Description
20% glass bead filled, high heat ABS compound

General	
Filler / Reinforcement	• Glass Bead, 20% Filler by Weight
Features	• Good Flow
Processing Method	• Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.18 g/cm³	1.18 g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (220°C/10.0 kg)	17 cm³/10min	17 cm³/10min	ISO 1133
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Modulus	392000 psi	2700 MPa	ISO 527-2/1A/1
Tensile Stress			ISO 527-2/1A/50
Yield	5220 psi	36.0 MPa	
Break	4930 psi	34.0 MPa	
Tensile Strain (Yield)	2.9 %	2.9 %	ISO 527-2/1A/50
Nominal Tensile Strain at Break	15 %	15 %	ISO 527-2/1A/50
Flexural Modulus [1]	479000 psi	3300 MPa	ISO 178
Flexural Stress [1] (4.8% Strain)	10000 psi	69.0 MPa	ISO 178
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	1.4 ft·lb/in²	3.0 kJ/m²	
73°F (23°C)	3.3 ft·lb/in²	7.0 kJ/m²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F (-30°C)	12 ft·lb/in²	26 kJ/m²	
73°F (23°C)	14 ft·lb/in²	29 kJ/m²	
Hardness	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Ball Indentation Hardness (H 358/30)	16800 psi	116 MPa	ISO 2039-1
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Heat Deflection Temperature			
66 psi (0.45 MPa), Unannealed	201 °F	94.0 °C	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	180 °F	82.0 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	226 °F	108 °C	ISO 306/A50
--	216 °F	102 °C	ISO 306/B50
Electrical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Surface Resistivity	1.0E+14 ohms	1.0E+14 ohms	IEC 60093
Volume Resistivity	1.0E+15 ohms·m	1.0E+15 ohms·m	IEC 62631-3-1
Comparative Tracking Index (Solution A)	600 V	600 V	IEC 60112

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Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Burning Rate			
0.0787 in (2.00 mm)	< 3.9 in/min	< 100 mm/min	ISO 3795
0.0787 in (2.00 mm)	< 3.9 in/min	< 100 mm/min	FMVSS 302
Flammability Classification			IEC 60695-11-10, -20
0.06 in (1.6 mm)	HB	HB	
0.13 in (3.2 mm)	HB	HB	
Glow Wire Ignition Temperature			IEC 60695-2-13
0.06 in (1.5 mm)	1290 °F	700 °C	
0.12 in (3.0 mm)	1290 °F	700 °C	

Additional Information

1.) Not for use in food contact applications
2.) Not for use in medical or pharmaceutical applications

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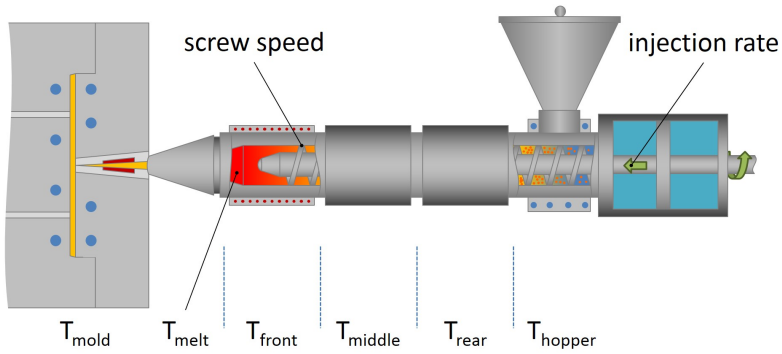

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Suggested Max Regrind	30 %	30 %
Processing (Melt) Temp	446 to 482 °F	230 to 250 °C
Mold Temperature	104 to 176 °F	40 to 80 °C

Notes

[1] 0.079 in/min (2.0 mm/min)

Notes

These are typical property values not to be construed as specification limits.