Technical Data Sheet

Ronfalin ABS 1412 GF 20

Acrylonitrile Butadiene Styrene
LyondellBasell Industries
Engineering Plastics

Product Description	
20% glass fiber reinforced ABS compound. (Former name: POLYMAN FABS 20GF)	
General	
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight
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)	12 cm³/10min	12 cm³/10min	ISO 1133
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Modulus	899000 psi	6200 MPa	ISO 527-1/1A/1
Tensile Stress (Break)	11000 psi	76.0 MPa	ISO 527-2/1A/5
Tensile Strain (Break)	1.8 %	1.8 %	ISO 527-2/5
Flexural Modulus [1]	943000 psi	6500 MPa	ISO 178
Flexural Stress			ISO 178
2.2% Strain [1]	17400 psi	120 MPa	
2.2% Strain [2, 3]	16000 psi	110 MPa	
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°f (-30°c)	2.9 ft·lb/in²	6.0 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)	10 ft·lb/in²	22 kJ/m²	
73°f (23°c)	10 ft·lb/in²	21 kJ/m²	
Hardness	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Ball Indentation Hardness (H 358/30)	21300 psi	147 MPa	ISO 2039-1
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Deflection Temperature Under Load			
66 Psi (0.45 Mpa), Unannealed	214 °F	101 °C	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	203 °F	95.0 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	216 °F	102 °C	ISO 306/B50
--	226 °F	108 °C	ISO 306/A50
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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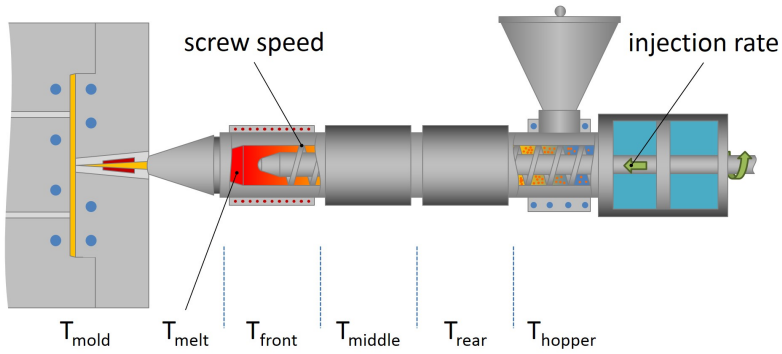

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Processing (Melt) Temp	446 to 482 °F	230 to 250 °C
Mold Temperature	104 to 176 °F	40 to 80 °C

Notes

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

[2] 0.091 in/min (2.3 mm/min)

[3] at Break

Notes

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