Technical Data Sheet

RONFALIN® ABS 1344 FC

Acrylonitrile Butadiene Styrene
Engineering Plastics

Product Description
High impact grade with food contact (FC) approval. (Former name: POLYMAN ABS M/TK HI)

General	
Features	• Medium Impact Resistance
Processing Method	• Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.04 g/cm³	1.04 g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (220°C/10.0 kg)	21 cm³/10min	21 cm³/10min	ISO 1133
Molding Shrinkage	0.40 to 0.70 %	0.40 to 0.70 %	ISO 294-4
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Modulus	334000 psi	2300 MPa	ISO 527-2/1A/1
Tensile Stress (Yield)	6240 psi	43.0 MPa	ISO 527-2/1A/50
Tensile Strain (Yield)	2.4 %	2.4 %	ISO 527-2/1A/50
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	5.2 ft·lb/in²	11 kJ/m²	
73°F (23°C)	10 ft·lb/in²	21 kJ/m²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F (-30°C)	No Break	No Break	
73°F (23°C)	No Break	No Break	
Hardness	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Ball Indentation Hardness (H 358/30)	15100 psi	104 MPa	ISO 2039-1
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Heat Deflection Temperature			
66 psi (0.45 MPa), Unannealed	189 °F	87.0 °C	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	165 °F	74.0 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	221 °F	105 °C	ISO 306/A50
--	205 °F	96.0 °C	ISO 306/B50
Electrical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Surface Resistivity	> 1.0E+15 ohms	> 1.0E+15 ohms	IEC 60093
Volume Resistivity	> 1.0E+13 ohms·m	> 1.0E+13 ohms·m	IEC 62631-3-1
Comparative Tracking Index	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)	1.4 in/min	36 mm/min	ISO 3795
0.0787 in (2.00 mm)	1.4 in/min	36 mm/min	FMVSS 302
Flammability Classification			IEC 60695-11-10, -20
0.06 in (1.5 mm)	HB	HB	
0.12 in (3.0 mm)	HB	HB	
Glow Wire Flammability Index			IEC 60695-2-12
0.06 in (1.5 mm)	1200 °F	650 °C	
0.12 in (3.0 mm)	1200 °F	650 °C	
Glow Wire Ignition Temperature			IEC 60695-2-13
0.06 in (1.5 mm)	1250 °F	675 °C	
0.12 in (3.0 mm)	1250 °F	675 °C	

Additional Information

ABS can normally be left in the cylinder. If in doubt purge with polyolefin
Finishing

"ABS is suitable for machining. Varnishing, printing, gluing and embossing can be carried out using commercially available products.
Electroplating is affected by rubber type and content as well moulded in stress and orientation. Use of special electroplating types is recommended for optimum adhesion.
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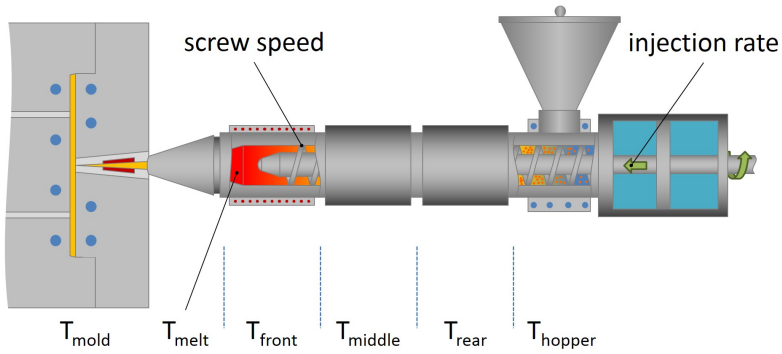

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Drying Time, Maximum	12 hr	12 hr
Suggested Max Moisture	0.00 to 0.10 %	0.00 to 0.10 %
Suggested Max Regrind	30 %	30 %
Hopper Temperature	122 °F	50 °C
Rear Temperature	356 to 410 °F	180 to 210 °C
Middle Temperature	401 to 455 °F	205 to 235 °C
Front Temperature	446 to 500 °F	230 to 260 °C
Processing (Melt) Temp	446 to 500 °F	230 to 260 °C
Mold Temperature	104 to 176 °F	40 to 80 °C
Back Pressure	725 to 2180 psi	5.00 to 15.0 MPa
Cushion	0.0787 to 0.197 in	2.00 to 5.00 mm
Screw Speed	1.6 ft/sec	30 m/min

Notes

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