

Technical Data Sheet

RONFALIN® SAN 4401 FC

Styrene Acrylonitrile
Engineering Plastics

Product Description

Standard SAN grade for injection molding and extrusion. This grade is available with and without UV stabilization. Food contact approved. (Former name: POLYMAN SAN 24/5)

General

Processing Method	• Extrusion	• Injection Molding
Resin ID (ISO 1043)	• SAN	

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.08 g/cm³	1.08 g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (230°C/3.8 kg)	5.00 cm³/10min	5.00 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	537000 psi	3700 MPa	ISO 527-2/1A/1
Tensile Stress (Break)	10200 psi	70.0 MPa	ISO 527-2/1A/5
Tensile Strain (Break)	3.0 %	3.0 %	ISO 527-2/1A/5
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	1.4 ft·lb/in²	3.0 kJ/m²	ISO 179/1eA
Charpy Unnotched Impact Strength 73°F (23°C)	8.1 ft·lb/in²	17 kJ/m²	ISO 179/1eU
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Ball Indentation Hardness (H 358/30)	23900 psi	165 MPa	ISO 2039-1
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Heat Deflection Temperature 66 psi (0.45 MPa), Unannealed	216 °F	102 °C	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	208 °F	98.0 °C	ISO 75-2/Af
Vicat Softening Temperature --	230 °F	110 °C	ISO 306/A50
--	214 °F	101 °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
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 0.06 in (1.5 mm)	HB	HB	IEC 60695-11-10, -20
0.12 in (3.0 mm)	HB	HB	

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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
Rear Temperature	356 to 392 °F	180 to 200 °C
Middle Temperature	410 to 446 °F	210 to 230 °C
Front Temperature	464 to 482 °F	240 to 250 °C
Nozzle Temperature	464 to 500 °F	240 to 260 °C
Processing (Melt) Temp	428 to 482 °F	220 to 250 °C
Mold Temperature	122 to 176 °F	50 to 80 °C
Injection Pressure	14500 to 21800 psi	100 to 150 MPa
Injection Rate	Moderate-Fast	Moderate-Fast
Holding Pressure	4350 to 13100 psi	30.0 to 90.0 MPa
Back Pressure	725 to 2180 psi	5.00 to 15.0 MPa
Screw Speed	< 2.0 ft/sec	< 36 m/min

Notes

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