

Technical Data Sheet

Ronfalin ASA 3421 U

Acrylonitrile Styrene Acrylate

LyondellBasell Industries

Engineering Plastics

Product Description

Impact modified ASA with increased heat resistance and very good UV stability. (Former name: POLYMAN ASA E/MI 1010 H UV+)

General

Features	• Good Flow		
Processing Method	• Extrusion	• Injection Molding	

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.06 g/cm ³	1.06 g/cm ³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (220°C/10.0 Kg)	7.0 cm ³ /10min	7.0 cm ³ /10min	ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	348000 psi	2400 MPa	ISO 527-1/1A/1 ISO 527-2/1A/50
Tensile Stress			
Yield	7250 psi	50.0 MPa	
Break	6530 psi	45.0 MPa	
Tensile Strain (Yield)	3.6 %	3.6 %	ISO 527-2/1A/50
Nominal Tensile Strain at Break	5.0 %	5.0 %	ISO 527-2/1A/50
Flexural Modulus ¹	377000 psi	2600 MPa	ISO 178
Flexural Stress ¹ (4.8% Strain)	11600 psi	80.0 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	0.95 ft·lb/in ²	2.0 kJ/m ²	
73°F (23°C)	5.7 ft·lb/in ²	12 kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F (-30°C)	12 ft·lb/in ²	26 kJ/m ²	
73°F (23°C)	29 ft·lb/in ²	60 kJ/m ²	
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Ball Indentation Hardness (H 358/30)	13900 psi	96.0 MPa	ISO 2039-1
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 Psi (0.45 Mpa), Unannealed	217 °F	103 °C	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	190 °F	88.0 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	216 °F	102 °C	ISO 306/B50
--	244 °F	118 °C	ISO 306/A50
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 (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 (1.5 Mm)	HB	HB	
0.12 In (3.0 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	464 to 518 °F	240 to 270 °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.