

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

Material Status	• Commercial: Active	
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America
Features	• Good Flow	• UV Stabilized
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
Tensile Stress			ISO 527-2/1A/50
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

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Notes

¹ 0.079 in/min (2.0 mm/min)

Notes

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

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Product Storage and Handling

- Product should be stored in dry conditions at temperatures below 50°C and protected from UV-light
- Improper storage may bring damage to the packaging and can negatively affects on the quality of this product
- Keep material completely dry for good processing

Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

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