

Technical Data Sheet

Ronfalin ABS 1443 LE

Acrylonitrile Butadiene Styrene

LyondellBasell Industries

Engineering Plastics

Product Description

Low Emission ABS compound with increased heat distortion temperature and impact strength. Available with and without UV-stabilization. (Former name: POLYMAN ABS M/Hi W LE UV)

General

Features	• Good Flow
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• ABS

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.05 g/cm ³	1.05 g/cm ³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (220°C/10.0 Kg)	17 cm ³ /10min	17 cm ³ /10min	ISO 1133
VOC Content	< 50.0 µgC/g	< 50.0 µgC/g	VDA 277

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	334000 psi	2300 MPa	ISO 527-2/1A/1
Tensile Stress			ISO 527-2/1A/50
Yield	6240 psi	43.0 MPa	
Break	5220 psi	36.0 MPa	
Tensile Strain (Yield)	2.9 %	2.9 %	ISO 527-2/1A/50
Nominal Tensile Strain at Break	12 %	12 %	ISO 527-2/1A/50
Flexural Modulus ¹	377000 psi	2600 MPa	ISO 178
Flexural Stress ¹ (4.6% Strain)	10700 psi	74.0 MPa	ISO 178

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	3.8 ft·lb/in ²	8.0 kJ/m ²	
73°F (23°C)	10 ft·lb/in ²	22 kJ/m ²	
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
Deflection Temperature Under Load			
66 Psi (0.45 Mpa), Unannealed	198 °F	92.0 °C	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	183 °F	84.0 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	216 °F	102 °C	ISO 306/B50
--	234 °F	112 °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	

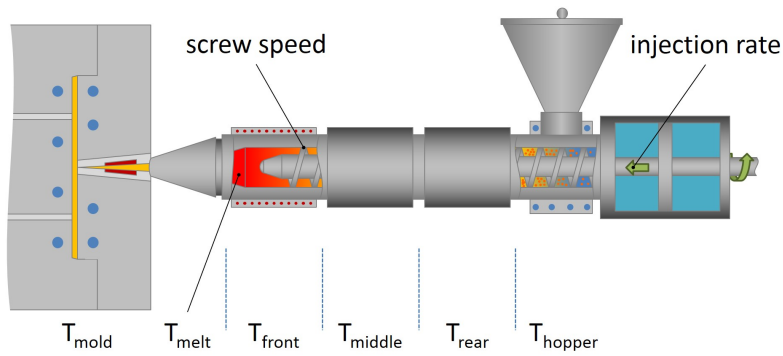
Additional Information

- 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	446 to 482 °F	230 to 250 °C
Mold Temperature	104 to 176 °F	40 to 80 °C