

Technical Data Sheet

Polyman (ASA) WR/MI

Acrylonitrile Styrene Acrylate

LyondellBasell Industries

Engineering Plastics

Product Description

medium impact ASA grade with good weatherability

General

UL File Number	• E86615
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• ASA

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)	19 cm ³ /10min	19 cm ³ /10min	ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	261000 psi	1800 MPa	ISO 527-1/1A/1
Tensile Stress (Yield)	5660 psi	39.0 MPa	ISO 527-2/1A/50
Tensile Strain (Yield)	3.1 %	3.1 %	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)	2.4 ft·lb/in ²	5.0 kJ/m ²	
73°F (23°C)	8.1 ft·lb/in ²	17 kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F (-30°C)	38 ft·lb/in ²	80 kJ/m ²	
73°F (23°C)	No Break	No Break	
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Ball Indentation Hardness (H 358/30)	11900 psi	82.0 MPa	ISO 2039-1
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 Psi (0.45 Mpa), Unannealed	180 °F	82.0 °C	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	160 °F	71.0 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	199 °F	93.0 °C	ISO 306/B50
--	216 °F	102 °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	600 V	600 V	IEC 60112
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
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)	1250 °F	675 °C	
0.12 In (3.0 Mm)	1250 °F	675 °C	
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	