

Technical Data Sheet

# Polyman (ABS) M/AQ schwarz LE

Acrylonitrile Butadiene Styrene  
LyondellBasell Industries  
Engineering Plastics

**Product Description**

Increased impact modified and heat resistant ABS for automotive applications with low emission

**General**

Additive	• Impact Modifier		
Features	• High Heat Resistance	• Impact Modified	• Low Emissions
Uses	• Automotive Applications		
Processing Method	• Injection Molding		
Part Marking Code (ISO 11469)	• >ABS<		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
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Density	1.04 g/cm <sup>3</sup>	1.04 g/cm <sup>3</sup>	ISO 1183/A
Melt Volume-Flow Rate (MVR) (220°C/10.0 Kg)	13 cm <sup>3</sup> /10min	13 cm <sup>3</sup> /10min	ISO 1133
Water Absorption			ISO 62
Equilibrium, 73°F (23°C), 50% Rh	1.2 %	1.2 %	

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
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Tensile Modulus	334000 psi	2300 MPa	ISO 527-1/1A/1
Tensile Stress (Yield)	6530 psi	45.0 MPa	ISO 527-2/1A/50
Tensile Strain (Yield)	2.8 %	2.8 %	ISO 527-2/1A/50

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
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Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	3.3 ft·lb/in <sup>2</sup>	7.0 kJ/m <sup>2</sup>	
73°F (23°C)	9.0 ft·lb/in <sup>2</sup>	19 kJ/m <sup>2</sup>	
Charpy Unnotched Impact Strength			ISO 179/1eU
73°F (23°C)	No Break	No Break	
Notched Izod Impact (Area) (73°F (23°C))	10.5 ft·lb/in <sup>2</sup>	22.0 kJ/m <sup>2</sup>	ASTM D256

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
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Ball Indentation Hardness (H 358/30)	13800 psi	95.0 MPa	ISO 2039-1
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Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
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Deflection Temperature Under Load			
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			
--	210 °F	99.0 °C	ISO 306/B50
--	237 °F	114 °C	ISO 306/A120

Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
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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

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
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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	