

Technical Data Sheet

Polyman (ABS) M/Hi-A

Acrylonitrile Butadiene Styrene
LyondellBasell Industries
Engineering Plastics

Product Description

increased impact modified ABS-standard with antistatic behaviour

General

Additive	• Antistatic	• Impact Modifier
Features	• Antistatic	• Impact Modified
Automotive Specifications	• GM QK 002021 RZ Color: 70400 Black	• IMDS ID 6856215 Color: 70400 Black
Processing Method	• Injection Molding	
Part Marking Code (ISO 11469)	• >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)	15 cm ³ /10min	15 cm ³ /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
Tensile Modulus	319000 psi	2200 MPa	ISO 527-1/1A/1
Tensile Stress (Yield)	6960 psi	48.0 MPa	ISO 527-2/1A/50
Tensile Strain (Yield)	2.1 %	2.1 %	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)	4.3 ft·lb/in ²	9.0 kJ/m ²	
73°F (23°C)	9.5 ft·lb/in ²	20 kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F (-30°C)	34 ft·lb/in ²	71 kJ/m ²	
73°F (23°C)	No Break	No Break	
Notched Izod Impact (Area) (73°F (23°C))	11.9 ft·lb/in ²	25.0 kJ/m ²	ASTM D256

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Ball Indentation Hardness (H 358/30)	16000 psi	110 MPa	ISO 2039-1

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 Psi (0.45 Mpa), Unannealed	203 °F	95.0 °C	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	196 °F	91.0 °C	ISO 75-2/Af
Vicat Softening Temperature	201 °F	94.0 °C	ISO 306/B50

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	
Glow Wire Flammability Index			IEC 60695-2-12
0.08 In (2.0 Mm)	1020 °F	550 °C	