

Technical Data Sheet

Polyman (ABS) HH 3

Acrylonitrile Butadiene Styrene
LyondellBasell Industries
Engineering Plastics

Product Description
high heat resistant ABS grade

General		
Automotive Specifications	• GM QK 002013 R Color: 70400 Black	• IMDS ID 33072212 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)	7.0 cm ³ /10min	7.0 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)	7690 psi	53.0 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
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)	2.9 ft·lb/in ²	6.0 kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
73°F (23°C)	24 ft·lb/in ²	50 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	230 °F	110 °C	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	221 °F	105 °C	ISO 75-2/af
Vicat Softening Temperature	226 °F	108 °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
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 Flammability Index			IEC 60695-2-12
0.12 In (3.0 Mm)	1200 °F	650 °C	

Additional Information
 1.) Not for use in food contact applications
 2.) Not for use in medical or pharmaceutical applications