Technical Data Sheet

POLYMAN® (ABS) M/TK-H

Acrylonitrile Butadiene Styrene
Engineering Plastics

Product Description
heat resistant ABS grade with good flow

General	
Automotive Specifications	• GM QK 002032 Color: Gray
Processing Method	• Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.05 g/cm³	1.05 g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (220°C/10.0 kg)	17 cm³/10min	17 cm³/10min	ISO 1133
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Modulus	348000 psi	2400 MPa	ISO 527-2/1A/1
Tensile Stress (Yield)	6530 psi	45.0 MPa	ISO 527-2/1A/50
Tensile Strain (Yield)	2.5 %	2.5 %	ISO 527-2/1A/50
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Charpy Notched Impact Strength (73°F (23°C))	5.2 ft·lb/in²	11 kJ/m²	ISO 179/1eA
Charpy Unnotched Impact Strength			ISO 179/1eU
73°F (23°C)	29 ft·lb/in²	60 kJ/m²	
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**
Heat Deflection Temperature			
66 psi (0.45 MPa), Unannealed	214 °F	101 °C	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	203 °F	95.0 °C	ISO 75-2/Af
Vicat Softening Temperature	212 °F	100 °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
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
Glow Wire Flammability Index			IEC 60695-2-12
0.06 in (1.5 mm)	1200 °F	650 °C	
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

Notes

These are typical property values not to be construed as specification limits.