

Technical Data Sheet

**Polyman (ABS) M/TK A K1459**

Acrylonitrile Butadiene Styrene
LyondellBasell Industries
Engineering Plastics

Product Description

ABS standard grade with higher softening temperature, antistatic, suitable for food contact applications

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• 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)	29 cm ³ /10min	29 cm ³ /10min	ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	363000 psi	2500 MPa	ISO 527-1/1A/1
Tensile Stress (Yield)	7540 psi	52.0 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			ISO 179/1eA
-22°F (-30°C)	3.3 ft·lb/in ²	7.0 kJ/m ²	
73°F (23°C)	7.1 ft·lb/in ²	15 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)	15200 psi	105 MPa	ISO 2039-1
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 psi (0.45 MPa), Unannealed	205 °F	96.0 °C	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	198 °F	92.0 °C	ISO 75-2/ Af
Vicat Softening Temperature	208 °F	98.0 °C	ISO 306/B50
Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Surface Resistivity	> 1.0E+13 ohms	> 1.0E+13 ohms	IEC 60093
Volume Resistivity	> 1.0E+12 ohms·m	> 1.0E+12 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
Flammability Classification			IEC 60695-11-10, -20
0.06 in (1.5 mm)	HB	HB	
0.12 in (3.0 mm)	HB	HB	

Notes

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

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Product Storage and Handling

- Product should be stored in dry conditions at temperatures below 50°C and protected from UV-light
- Improper storage may bring damage to the packaging and can negatively affects on the quality of this product

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- Keep material completely dry for good processing

Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

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