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	
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• ABS

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)	29 cm³/10min	29 cm³/10min	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/in²	7.0 kJ/m²	
73°f (23°c)	7.1 ft·lb/in²	15 kJ/m²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°f (-30°c)	38 ft·lb/in²	80 kJ/m²	
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.