Technical Data Sheet

Polyman (ABS) M/MI 40 K1836

Acrylonitrile Butadiene Styrene
LyondellBasell Industries
Engineering Plastics

Product Description	
High flow and medium impact compound	
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)	40 cm³/10min	40 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)	5950 psi	41.0 MPa	ISO 527-2/1A/50
Tensile Strain (Yield)	2.2 %	2.2 %	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/in²	9.0 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)	32 ft·lb/in²	67 kJ/m²	
73°f (23°c)	40 ft·lb/in²	85 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**
Vicat Softening Temperature	203 °F	95.0 °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 (Solution A)	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	

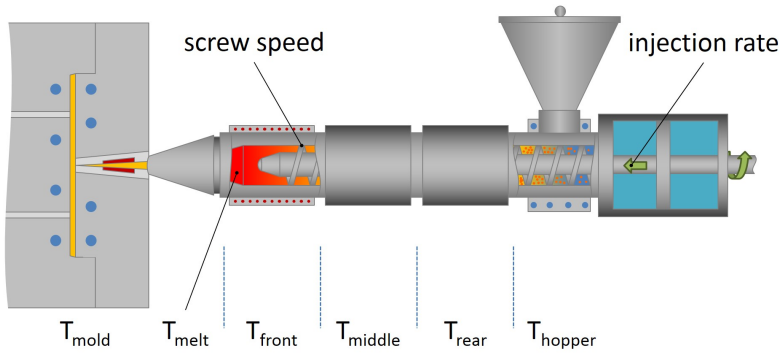
Additional Information

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

Technical Data Sheet

Polyman (ABS) M/MI 40 K1836

Acrylonitrile Butadiene Styrene
LyondellBasell Industries
Engineering Plastics



Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Processing (Melt) Temp	446 to 482 °F	230 to 250 °C
Mold Temperature	104 to 176 °F	40 to 80 °C

Notes

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