

Technical Data Sheet

Polyman ABS M/MI A 40 NAT



Acrylonitrile Butadiene Styrene

Product Description

High flow and medium impact ABS grade

Regulatory Status

For regulatory compliance information, see *Polyman ABS M/MI A 40 NAT* [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

Status	Commercial: Active
Availability	Africa-Middle East; Asia-Pacific; Europe; Latin America
Processing Method	Injection Molding
Attribute	High Flow; Medium Impact Resistance
Additive	Antistatic
Resin ID	ABS

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (220 °C/10.0 kg)	42	cm ³ /10 min	ISO 1133
Density, (Method A)	1.05	g/cm ³	ISO 1183
Mechanical			
Tensile Stress at Yield, (Type 1A, 50 mm/min)	41.0	MPa	ISO 527-2
Tensile Strain at Yield, (Type 1A, 50 mm/min)	2.2	%	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	2500	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	15	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	9.0	kJ/m ²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	85	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise)	67	kJ/m ²	ISO 179
Hardness			
Ball Indentation Hardness, (H 358/30)	109	MPa	ISO 2039-1
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	93.0	°C	ISO 306
(A (10N), 50 °C/h)	99.0	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	81.0	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	69.0	°C	ISO 75-2/A
Flammable			
Glow Wire Flammability Index			
(1.5 mm)	650	°C	IEC 60695-2-12
(3.0 mm)	650	°C	IEC 60695-2-12

Glow Wire Ignition Temperature		
(1.5 mm)	675 °C	IEC 60695-2-13
(3.0 mm)	675 °C	IEC 60695-2-13
UL Information		
Flammability Classification		
(1.5 mm)	HB	IEC 60695-11-10, -20
(3.0 mm)	HB	IEC 60695-11-10, -20
UL File Number	E86615	

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.

Company Information

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

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