

Technical Data Sheet



Polyman (ABS) HH

Acrylonitrile Butadiene Styrene
LyondellBasell Industries
Engineering Plastics

Product Description

Heat resistant ABS grade

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	
Automotive Specifications	• GM QK 002014 Color: Natural		
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)	4.0 cm ³ /10min	4.0 cm ³ /10min	ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	276000 psi	1900 MPa	ISO 527-1/1A/1
Tensile Stress (Yield)	7110 psi	49.0 MPa	ISO 527-2/1A/50
Tensile Strain (Yield)	2.7 %	2.7 %	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)	5.7 ft·lb/in ²	12 kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
73°F (23°C)	31 ft·lb/in ²	65 kJ/m ²	
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Ball Indentation Hardness (H 358/30)	13600 psi	94.0 MPa	ISO 2039-1
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 psi (0.45 MPa), Unannealed	225 °F	107 °C	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	217 °F	103 °C	ISO 75-2/Af
Vicat Softening Temperature	225 °F	107 °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)	1.7 in/min	43 mm/min	ISO 3795
0.0787 in (2.00 mm)	1.7 in/min	43 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	
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

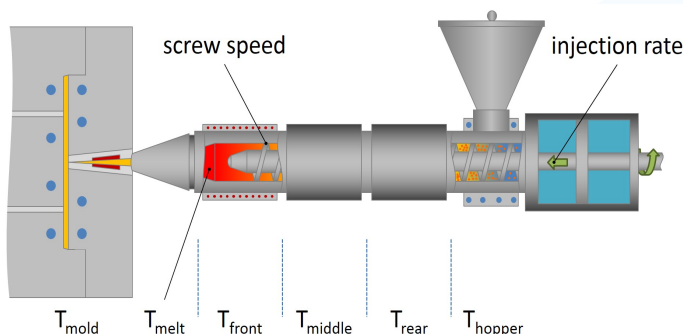
- 1.) Not for use in food contact applications
- 2.) Not for use in medical or pharmaceutical applications

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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 500 °F	230 to 260 °C
Mold Temperature	104 to 176 °F	40 to 80 °C

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
- 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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