

Technical Data Sheet

Schulamid 6 MV HI H5

Polyamide 6
LyondellBasell Industries
Engineering Plastics

Product Description

Higher impact Polyamide 6, heat stabilized

General

Features	<ul style="list-style-type: none"> Grease Resistant Heat Stabilized 	<ul style="list-style-type: none"> High Impact Resistance Low Temperature Toughness 	<ul style="list-style-type: none"> Medium Viscosity Oil Resistant
Automotive Specifications	GM QK 002621 P Color: Natural • IMDS ID 4221280 Color: Natural		
UL File Number	E86615		
Processing Method	Injection Molding		
Resin ID (ISO 1043)	PA6-I		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
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Density	1.09 g/cm ³	1.09 g/cm ³	ISO 1183/A
Water Absorption			ISO 62
Equilibrium, 73°F (23°C), 50% Rh	2.3 %	2.3 %	

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
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Tensile Modulus	319000 psi	2200 MPa	ISO 527-1/1A/1
Tensile Stress			
Yield	8990 psi	62.0 MPa	ISO 527-2/1A/50
Break	5950 psi	41.0 MPa	ISO 527-2
Tensile Strain (Yield)	5.0 %	5.0 %	ISO 527-2/1A/50
Nominal Tensile Strain at Break	30 %	30 %	ISO 527-2/1A/50

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
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Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	5.7 ft·lb/in ²	12 kJ/m ²	
73°F (23°C)	21 ft·lb/in ²	45 kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F (-30°C)	40 ft·lb/in ²	85 kJ/m ²	
73°F (23°C)	No Break	No Break	

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
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Ball Indentation Hardness (H 358/30)	16000 psi	110 MPa	ISO 2039-1
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Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
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Deflection Temperature Under Load			
66 Psi (0.45 Mpa), Unannealed	347 °F	175 °C	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	140 °F	60.0 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	347 °F	175 °C	ISO 306/B50
--	419 °F	215 °C	ISO 306/A50
Melting Temperature	430 °F	221 °C	ISO 11357-3

Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
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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	600 V	600 V	IEC 60112



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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
0.030 In (0.75 Mm)	HB	HB	
0.06 In (1.5 Mm)	HB	HB	
0.12 In (3.0 Mm)	HB	HB	

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Suggested Max Moisture	0.04 to 0.10 %	0.04 to 0.10 %
Processing (Melt) Temp	482 to 518 °F	250 to 270 °C
Mold Temperature	140 to 194 °F	60 to 90 °C

Notes

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