

SCHULAMID[®] 66 MV HI K1416

Polyamide 66
Engineering Plastics

Product Description

Impact modified Polyamide 66

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• High Impact Resistance • Low Temperature Toughness	• Medium Viscosity • Oil Resistant	
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• PA66I		

Physical	Dry	Conditioned	Unit	Test Method
Density	1.08	--	g/cm ³	ISO 1183/A
Molding Shrinkage	1.2 to 1.8	--	%	ISO 294-4
Water Absorption				ISO 62
Equilibrium, 73°F (23°C), 50% RH	2.1	--	%	

Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	305000 (2100)	109000 (750)	psi (MPa)	ISO 527-2/1A/1
Tensile Stress (Yield)	7980 (55.0)	5800 (40.0)	psi (MPa)	ISO 527-2/1A/50
Tensile Strain (Yield)	5.5	25	%	ISO 527-2/1A/50
Nominal Tensile Strain at Break	> 40	> 100	%	ISO 527-2/1A/50
Flexural Modulus ¹	283000 (1950)	--	psi (MPa)	ISO 178
Flexural Stress ¹	10900 (75.0)	--	psi (MPa)	ISO 178
Flexural Strain at Flexural Strength	7.0	--	%	ISO 176

Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F (-30°C)	8.6 (18)	--	ft·lb/in ² (kJ/m ²)	
73°F (23°C)	31 (65)	45 (95)	ft·lb/in ² (kJ/m ²)	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F (-30°C)	No Break	--		
73°F (23°C)	No Break	No Break		

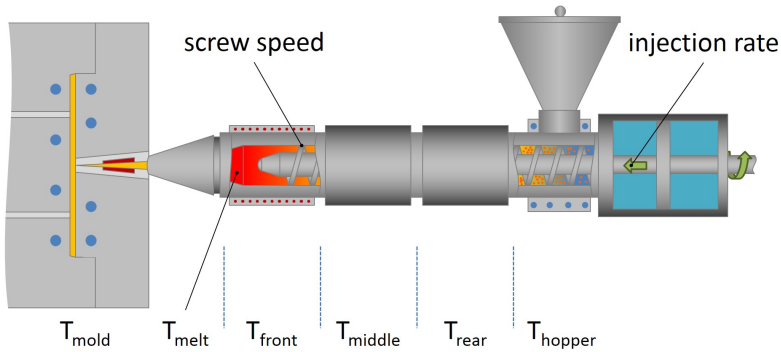
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Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
66 psi (0.45 MPa), Unannealed	284 (140)	--	°F (°C)	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	144 (62.0)	--	°F (°C)	ISO 75-2/Af
Vicat Softening Temperature				
--	410 (210)	--	°F (°C)	ISO 306/B50
--	> 482 (> 250)	--	°F (°C)	ISO 306/A50
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	> 1.0E+15	> 1.0E+12	ohms	IEC 60093
Volume Resistivity	> 1.0E+13	> 1.0E+10	ohms·m	IEC 62631-3-1
Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate				
0.0787 in (2.00 mm)	0.91 (23)	--	in/min (mm/min)	ISO 3795
0.0787 in (2.00 mm)	0.91 (23)	--	in/min (mm/min)	FMVSS 302
Flammability Classification				IEC 60695-11-10, -20
0.06 in (1.5 mm)	HB	--		
0.12 in (3.0 mm)	HB	--		
Glow Wire Flammability Index				IEC 60695-2-12
0.06 in (1.5 mm)	1200 (650)	--	°F (°C)	
0.12 in (3.0 mm)	1200 (650)	--	°F (°C)	

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Injection	Dry (English)	Dry (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 %
Suggested Max Regrind	20 %	20 %
Processing (Melt) Temp	518 to 554 °F	270 to 290 °C
Mold Temperature	140 to 212 °F	60 to 100 °C

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Notes

¹ 0.079 in/min (2.0 mm/min)

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 affect 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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