

## Technical Data Sheet

# Schulamid 66 MV 3 NATURAL



Polyamide 66

### Product Description

Schulamid 66 MV 3 NATURAL is a Polyamide 66 material and is typically used in Injection Molding applications. Features include: Medium Viscosity.

<b>Processing Method</b>	Injection Molding
<b>Attribute</b>	Medium Viscosity

Typical Properties	Nominal Value	Units	Test Method
<b>Physical</b>			
Density, (Method A)	1.14	g/cm <sup>3</sup>	ISO 1183
Viscosity Number	145	cm <sup>3</sup> /g	ISO 307
<b>Mechanical</b>			
Tensile Stress at Yield			
(Type 1A, 50 mm/min)	90.0	MPa	ISO 527-2
(Type 1A, 50 mm/min) - Conditioned	70.0	MPa	ISO 527-2
Tensile Strain at Yield			
(Type 1A, 50 mm/min)	4.0	%	ISO 527-2
(Type 1A, 50 mm/min) - Conditioned	15	%	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	3000	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	1500	MPa	ISO 527-1
<b>Impact</b>			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	9.0	kJ/m <sup>2</sup>	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	7.0	kJ/m <sup>2</sup>	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	13	kJ/m <sup>2</sup>	ISO 179
(-30 °C, Type 1, Edgewise, Notch A) - Conditioned	5.0	kJ/m <sup>2</sup>	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	150	kJ/m <sup>2</sup>	ISO 179
(-30 °C, Type 1, Edgewise)	95	kJ/m <sup>2</sup>	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	No Break		ISO 179
(-30 °C, Type 1, Edgewise) - Conditioned	No Break		ISO 179
Unnotched Izod Impact Strength, (23 °C, Type 1)	No Break		ISO 180
<b>Hardness</b>			
Ball Indentation Hardness, (H 358/30)	150	MPa	ISO 2039-1
Ball Pressure Test, (165 °C)	Pass		IEC 60695-10-2
<b>Thermal</b>			

Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	225	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	90.0	°C	ISO 75-2/A
<b>Electrical</b>			
Volume Resistivity	>1.0E+13	ohm*m	IEC 62631-3-1
- Conditioned	10000000000	ohm*m	IEC 62631-3-1
Comparative Tracking Index (CTI)	600	V	IEC 60112
Surface Resistivity	>1.0E+15	ohm	IEC 60093
- Conditioned	1000000000000	ohm	IEC 60093
<b>Flammable</b>			
Burning Rate			
(2.00 mm)	0.0	mm/min	ISO 3795
(2.00 mm)	0.0	mm/min	FMVSS 302
Glow Wire Flammability Index	600	°C	IEC 60695-2-12
Glow Wire Ignition Temperature, (2.0 mm)	675	°C	IEC 60695-2-13
<b>UL Information</b>			
Flammability Classification, (0.75 mm)	V-2		IEC 60695-11-10, -20
UL File Number	86615		

<b>Injection Parameters</b>	<b>Nominal Value</b>	<b>Units</b>
Drying Time	3.0 to 4.0	hr
Drying Temperature	80	°C
Suggested Max Moisture	0.040 to 0.10	%
Processing (Melt) Temp	270 to 290	°C
Mold Temperature	60 to 100	°C