Technical Data Sheet

Schulamid 66 MV 3 NAT

Polyamide 66

Product Description

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

Processing Method	Injection Molding
Attribute	Medium Viscosity

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.14	g/cm³	ISO 1183
Viscosity Number	145	cm³/g	ISO 307
Mechanical			
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
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	9.0	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	7.0	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	13	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A) - Conditioned	5.0	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	150	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise)	95	kJ/m²	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
Hardness			
Ball Indentation Hardness, (H 358/30)	150	MPa	ISO 2039-1
Ball Pressure Test, (165 °C)	Pass		IEC 60695-10-2
Thermal			

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
Electrical			
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
Flammable			
Burning Rate			
(2.00 mm)	0.0	mm/min	FMVSS 302
(2.00 mm)	0.0	mm/min	ISO 3795
Glow Wire Flammability Index	600	°C	IEC 60695-2-12
Glow Wire Ignition Temperature, (2.0 mm)	675	°C	IEC 60695-2-13
UL Information			
Flammability Classification, (0.75 mm)	V-2		IEC 60695-11-10, -20
UL File Number	86615		

Injection Parameters	Nominal Value	Units
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