

Technical Data Sheet

Schulamid 66 MK40 HI H NAT



Polyamide 66

Product Description

40% mineral filled PA 66, impact modified, heat stabilized

Processing Method	Injection Molding
Attribute	Heat Stabilized; Impact Modified
Additive	Heat Stabilizer; Impact Modifier
Filler/Reinforcement	Mineral, 40%

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.45	g/cm ³	ISO 1183
Mechanical			
Tensile Strain at Break			
(Type 1A, 5 mm/min)	6.0	%	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	8.0	%	ISO 527-2
Tensile Stress at Break			
(Type 1A, 5 mm/min)	85.0	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	60.0	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	5500	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	3600	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	9.0	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	7.0	kJ/m ²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	12	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A) - Conditioned	9.0	kJ/m ²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	80	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise)	65	kJ/m ²	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	No Break		ISO 179
(-30 °C, Type 1, Edgewise) - Conditioned	90	kJ/m ²	ISO 179
Notched Izod Impact Strength, (-40 °C, Type 1, Notch A)	6.0	kJ/m ²	ISO 180
Unnotched Izod Impact Strength			
(23 °C, Type 1)	100	kJ/m ²	ISO 180
(-40 °C, Type 1)	70	kJ/m ²	ISO 180

Hardness

Ball Indentation Hardness, (H 358/30)	200	MPa	ISO 2039-1
Ball Pressure Test, (135 °C)	Pass		IEC 60695-10-2

Thermal

Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	210	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	120	°C	ISO 75-2/A

Electrical

Volume Resistivity	>1.0E+13	ohm*m	IEC 62631-3-1
- Conditioned	10000000000	0 ohm*m	IEC 62631-3-1
Comparative Tracking Index (CTI)	550	V	IEC 60112
Surface Resistivity	>1.0E+15	ohm	IEC 60093
- Conditioned	10000000000	000 ohm	IEC 60093

Flammable

Burning Rate			
(2.00 mm)	<100	mm/min	FMVSS 302
(2.00 mm)	<100	mm/min	ISO 3795
Glow Wire Flammability Index	600	°C	IEC 60695-2-12

UL Information

Flammability Classification, (3.2 mm)	HB		IEC 60695-11-10, -20
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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	280 to 300	°C
Mold Temperature	60 to 120	°C