

Technical Data Sheet

Schulamid 66 MKF 4015 NAT

Polyamide 66

Product Description

40% mineral and glass fiber reinforced, heat stabilized Polyamide 66

Processing Method Injection Molding

Attribute Good Stiffness/Impact Balance; Low Warpage; Oil Resistant

Filler/Reinforcement Glass Fiber/Mineral, 40%

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.44	g/cm ³	ISO 1183
Viscosity Number	140	cm ³ /g	ISO 307
Mechanical			
Tensile Strain at Break			
(Type 1A, 5 mm/min)	2.5	%	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	6.5	%	ISO 527-2
Tensile Stress at Break			
(Type 1A, 5 mm/min)	120	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	80.0	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	8300	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	5000	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	4.0	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	3.0	kJ/m ²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	5.0	kJ/m ²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	40	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise)	36	kJ/m ²	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	58	kJ/m ²	ISO 179
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	236	°C	ISO 306
(A (10N), 50 °C/h)	>250	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	245	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	210	°C	ISO 75-2/A

Electrical			
Volume Resistivity	>1.0E+13	ohm*m	IEC 62631-3-1
- Conditioned	>1.0E+10	ohm*m	IEC 62631-3-1
Surface Resistivity	>1.0E+15	ohm	IEC 60093
- Conditioned	>1.0E+12	ohm	IEC 60093

Flammable			
Burning Rate			
(2.00 mm)	40	mm/min	ISO 3795
(2.00 mm)	40	mm/min	FMVSS 302

UL Information			
Flammability Classification			
(1.5 mm)	HB		IEC 60695-11-10, -20
(3.0 mm)	HB		IEC 60695-11-10, -20

		Nominal Value	Units
Injection Parameters			
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	