

Technical Data Sheet

Schulamid 66 SK 1000 K1392 BLACK



Polyamide 66

Product Description

Schulamid 66 SK 1000 K1392 BLACK is a Polyamide 66 material and is typically used in Injection Molding applications. Features include: Low Temperature Toughness, Medium Viscosity, Oil Resistant, Ultra High Impact Resistance, and Ultra High Toughness.

Processing Method Injection Molding

Attribute Low Temperature Toughness; Medium Viscosity; Oil Resistant; Ultra High Impact Resistance; Ultra High Toughness

Resin ID PA66-HI

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.07	g/cm ³	ISO 1183
Mechanical			
Flexural Strain at Flexural Strength	7	%	ISO 178
Tensile Stress at Yield			
(Type 1A, 50 mm/min)	50.0	MPa	ISO 527-2
(Type 1A, 50 mm/min) - Conditioned	30.0	MPa	ISO 527-2
Nominal Tensile Strain at Break			
(50 mm/min, Type 1A) - Conditioned	>100	%	ISO 527-2
(50 mm/min, Type 1A)	>40	%	ISO 527-2
Flexural Modulus, (2.0 mm/min)	1650	MPa	ISO 178
Tensile Strain at Yield			
(Type 1A, 50 mm/min)	7.0	%	ISO 527-2
(Type 1A, 50 mm/min) - Conditioned	32	%	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	1800	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	600	MPa	ISO 527-1
Flexural Stress, (2.0 mm/min)	62.0	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	75	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	25	kJ/m ²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	120	kJ/m ²	ISO 179

Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	No Break	ISO 179	
(-30 °C, Type 1, Edgewise)	No Break	ISO 179	
(23 °C, Type 1, Edgewise) - Conditioned	No Break	ISO 179	

Thermal

Vicat Softening Temperature			
(B (50N), 50 °C/h)	175 °C	ISO 306	
(A (10N), 50 °C/h)	>250 °C	ISO 306	
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	135 °C	ISO 75-2/B	
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	60.0 °C	ISO 75-2/A	
RTI Elec			
(1.5 mm)	65.0 °C	UL 746B	
(3.0 mm)	65.0 °C	UL 746B	
RTI Imp			
(1.5 mm)	65.0 °C	UL 746B	
(3.0 mm)	65.0 °C	UL 746B	
RTI Str			
(1.5 mm)	65.0 °C	UL 746B	
(3.0 mm)	65.0 °C	UL 746B	

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)	38 mm/min	FMVSS 302	
(2.00 mm)	38 mm/min	ISO 3795	
Glow Wire Flammability Index			
(1.5 mm)	600 °C	IEC 60695-2-12	
(3.0 mm)	600 °C	IEC 60695-2-12	

Additional Information

Water Absorption 23C/50RH	2 %	ISO 62	
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UL Information

Flammability Classification			
(1.5 mm)	HB	IEC 60695-11-10, -20	
(3.0 mm)	HB	IEC 60695-11-10, -20	
UL File Number	E86615		

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