

## Technical Data Sheet

**Schulamid 66 SK1000 RED964231**

Polyamide 66

**Product Description**

*Schulamid 66 SK1000 RED964231* 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.

<b>Processing Method</b>	Injection Molding
<b>Attribute</b>	Low Temperature Toughness; Medium Viscosity; Oil Resistant; Ultra High Impact Resistance; Ultra High Toughness
<b>Resin ID</b>	PA66-HI

Typical Properties	Nominal Value	Units	Test Method
<b>Physical</b>			
Density, (Method A)	1.07	g/cm <sup>3</sup>	ISO 1183
<b>Mechanical</b>			
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
<b>Impact</b>			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	75	kJ/m <sup>2</sup>	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	25	kJ/m <sup>2</sup>	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	120	kJ/m <sup>2</sup>	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
<b>Thermal</b>			
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
<b>Electrical</b>			
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
<b>Flammable</b>			
Burning Rate			
(2.00 mm)	38	mm/min	ISO 3795
(2.00 mm)	38	mm/min	FMVSS 302
Glow Wire Flammability Index			
(1.5 mm)	600	°C	IEC 60695-2-12
(3.0 mm)	600	°C	IEC 60695-2-12
<b>Additional Information</b>			
Water Absorption 23C/50RH	2	%	ISO 62
<b>UL Information</b>			
Flammability Classification			
(1.5 mm)	HB		IEC 60695-11-10, -20
(3.0 mm)	HB		IEC 60695-11-10, -20
UL File Number	E86615		
<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	