

Technical Data Sheet

Schulamid 6 MV13 AS NAT



Polyamide 6

Product Description

Medium viscosity Polyamide 6 - standard grade

Processing Method Injection Molding

Attribute Good Processability; Good Toughness; Medium Viscosity; Oil Resistant

Resin ID PA6

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.13	g/cm ³	ISO 1183
Viscosity Number	140	cm ³ /g	ISO 307
Mechanical			
Tensile Stress at Yield			
(Type 1A, 50 mm/min)	85.0	MPa	ISO 527-2
(Type 1A, 50 mm/min) - Conditioned	45.0	MPa	ISO 527-2
Tensile Strain at Yield			
(Type 1A, 50 mm/min)	3.5	%	ISO 527-2
(Type 1A, 50 mm/min) - Conditioned	18	%	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	2800	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	1100	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	8.0	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	5.0	kJ/m ²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	35	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
Hardness			
Ball Indentation Hardness			
(H 358/30)	140	MPa	ISO 2039-1
(H 358/30) - Conditioned	85.0	MPa	ISO 2039-1
Thermal			

Vicat Softening Temperature			
(B (50N), 50 °C/h)	195	°C	ISO 306
(A (10N), 50 °C/h)	205	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	190	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	70.0	°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
Comparative Tracking Index (CTI)	600	V	IEC 60112
Surface Resistivity	>1.0E+15	ohm	IEC 60093
- Conditioned	>1.0E+12	ohm	IEC 60093

Flammable

Burning Rate			
(2.00 mm)	0.0	mm/min	ISO 3795
(2.00 mm)	0.0	mm/min	FMVSS 302
Glow Wire Flammability Index			
(1.5 mm) - Conditioned	850	°C	IEC 60695-2-12
(3.0 mm) - Conditioned	850	°C	IEC 60695-2-12

Additional Information

Water Absorption 23C/50RH	2.9	%	ISO 62
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UL Information

Flammability Classification			
(0.75 mm)	V-2		IEC 60695-11-10, -20
(1.5 mm)	V-2		IEC 60695-11-10, -20

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	250 to 270	°C
Mold Temperature	60 to 90	°C