Technical Data Sheet

Schulamid 6 MV14 LS BUE965183

Polyamide 6

Product Description
medium viscosity PA 6

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/cm³	ISO 1183
Viscosity Number	145	cm³/g	ISO 307
Mechanical			
Flexural Strain at Flexural Strength	6.5	%	ISO 178
Tensile Stress at Yield			
(Type 1A, 50 mm/min)	80.0	MPa	ISO 527-2
(Type 1A, 50 mm/min) - Conditioned	45.0	MPa	ISO 527-2
Nominal Tensile Strain at Break			
(50 mm/min, Type 1A) - Conditioned	>100	%	ISO 527-2
(50 mm/min, Type 1A)	10	%	ISO 527-2
Flexural Modulus	2300	MPa	ISO 178
Tensile Strain at Yield			
(Type 1A, 50 mm/min)	4.0	%	ISO 527-2
(Type 1A, 50 mm/min) - Conditioned	20	%	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	3000	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	1100	MPa	ISO 527-1
Flexural Stress	100	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	7.0	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	5.0	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	50	kJ/m²	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)	190	°C	ISO 306
(A (10N), 50 °C/h)	210	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	170	°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
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	FMVSS 302
(2.00 mm)	0.0	mm/min	ISO 3795
Glow Wire Flammability Index			
(1.5 mm)	850	°C	IEC 60695-2-12
(3.0 mm)	850	°C	IEC 60695-2-12
UL Information			
Flammability Classification			
(1.5 mm)	V-2		IEC 60695-11-10, -20
(3.0 mm)	V-2		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	250 to 270	°C
Mold Temperature	60 to 90	°C