Technical Data Sheet

Schulamid 6 GF30 HI FR4 BUE965201

Polyamide 6

Product Description

30% glass fibre reinforced and impact modified PA 6; flame retardant containing halogens without PBDE

Processing Method	Injection Molding
Attribute	Halogenated; Impact Modified
Additive	Flame Retardant; Impact Modifier
Filler/Reinforcement	Glass Fiber, 30%
Resin ID	PA6-I GF30 FR(17)

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.59	g/cm³	ISO 1183
Mechanical			
Tensile Strain at Break			
(Type 1A, 5 mm/min)	2.5	%	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	4.0	%	ISO 527-2
Tensile Stress at Break			
(Type 1A, 5 mm/min)	150	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	104	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	11000	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	8500	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	10	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	8.5	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	12	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	60	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise)	54	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	65	kJ/m²	ISO 179
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	203	°C	ISO 306
(A (10N), 120 °C/h)	211	°C	ISO 306

Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	216	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	207	°C	ISO 75-2/A
Electrical			
Volume Resistivity	>1.0E+13	ohm*m	IEC 62631-3-1
Comparative Tracking Index (CTI)	225	V	IEC 60112
Surface Resistivity	>1.0E+15	ohm	IEC 60093
Flammable			
Glow Wire Flammability Index			
(0.75 mm)	960	°C	IEC 60695-2-12
(1.5 mm)	960	°C	IEC 60695-2-12
(3.0 mm)	960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature			
(0.75 mm)	800	°C	IEC 60695-2-13
(1.5 mm)	800	°C	IEC 60695-2-13
(3.0 mm)	800	°C	IEC 60695-2-13
Oxygen Index	34	%	ISO 4589-2
UL Information			
Flammability Classification			
(0.75 mm)	V-0		IEC 60695-11-10, -20
(1.5 mm)	V-0		IEC 60695-11-10, -20
(3.0 mm)	V-0		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	%
Screw Speed	<250	mm/sec
Processing (Melt) Temp	240 to 270	°C
Injection Rate	Slow-Moderate	
Back Pressure	2.00 to 8.00	MPa
Mold Temperature	60 to 100	°C