Technical Data Sheet

Schulamid 6 GBF3015 FR2 NAT

Polyamide 6

Product Description

30% glass fibre and glass bead reinforced flame retardant PA6 compound, increased strength and dimensional stability; halogenfree; PBDE free, with low warpage

Processing Method	Injection Molding
Attribute	Good Dimensional Stability; Good Strength; Halogen Free; Low Warpage; PFAS free
Additive	Flame Retardant
Filler/Reinforcement	Glass Bead\Glass Fiber, 30%
Resin ID	PA6

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.42	g/cm³	ISO 1183
Mechanical			
Tensile Strain at Break			
(Type 1A, 5 mm/min)	2.7	%	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	5.5	%	ISO 527-2
Tensile Stress at Break			
(Type 1A, 5 mm/min)	110	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	62.0	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	8300	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	4400	MPa	ISO 527-1
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)	5.5	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	13	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	46	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise)	40	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	50	kJ/m²	ISO 179
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	208	°C	ISO 306
(A (10N), 120 °C/h)	215	°C	ISO 306

Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	214	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	198	°C	ISO 75-2/A
Electrical			
Comparative Tracking Index (CTI)	425	V	IEC 60112
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)	750	°C	IEC 60695-2-13
(1.5 mm)	750	°C	IEC 60695-2-13
(3.0 mm)	750	°C	IEC 60695-2-13
Oxygen Index	35	%	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	<250	mm/sec
Mold Temperature	60 to 100	°C