

## Technical Data Sheet

**Schuladur A GF30 HF FR1 BLK968093**

Polybutylene Terephthalate

**Product Description**

Flame retardant halogenated PBT reinforced with 30% glass fibre; without PBDE; high flow

<b>Processing Method</b>	Injection Molding
<b>Attribute</b>	Filled; Good Dimensional Stability; Halogenated; High Flow
<b>Additive</b>	Flame Retardant
<b>Filler/Reinforcement</b>	Glass Fiber, 30%
<b>Resin ID</b>	PBT GF30 FR(17)

Typical Properties	Nominal Value	Units	Test Method
<b>Physical</b>			
Melt Volume Flow Rate, (260 °C/5.0 kg)	35	cm <sup>3</sup> /10 min	ISO 1133
Density, (Method A)	1.64	g/cm <sup>3</sup>	ISO 1183
<b>Mechanical</b>			
Tensile Strain at Break, (Type 1A, 5 mm/min)	2.0	%	ISO 527-2
Tensile Stress at Break, (Type 1A, 5 mm/min)	140	MPa	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	11500	MPa	ISO 527-1
<b>Impact</b>			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	8.0	kJ/m <sup>2</sup>	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	7.0	kJ/m <sup>2</sup>	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	50	kJ/m <sup>2</sup>	ISO 179
(-30 °C, Type 1, Edgewise)	43	kJ/m <sup>2</sup>	ISO 179
<b>Hardness</b>			
Ball Pressure Test, (200 °C)	Pass		IEC 60695-10-2
<b>Thermal</b>			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	203	°C	ISO 306
(A (10N), 50 °C/h)	218	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	220	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	205	°C	ISO 75-2/A

RTI Elec			
(1.5 mm)	75.0	°C	UL 746B
(3.0 mm)	75.0	°C	UL 746B
(0.75 mm)	75.0	°C	UL 746B
RTI Imp			
(1.5 mm)	75.0	°C	UL 746B
(3.0 mm)	75.0	°C	UL 746B
(0.75 mm)	75.0	°C	UL 746B
RTI Str			
(1.5 mm)	75.0	°C	UL 746B
(3.0 mm)	75.0	°C	UL 746B
(0.75 mm)	75.0	°C	UL 746B

#### Electrical

Dielectric Strength, (in Oil, 1.00 mm, 23 °C, 2000 V/sec)	30	kV/mm	IEC 60243-1
Comparative Tracking Index (CTI), (Solution A)	250	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)	675	°C	IEC 60695-2-13
(1.5 mm)	675	°C	IEC 60695-2-13
(3.0 mm)	675	°C	IEC 60695-2-13
Oxygen Index	32	%	ISO 4589-2

#### UL Information

Flame Rating			
(1.5 mm)	5VA		UL 94
(1.5 mm)	V-0		UL 94
(3.0 mm)	V-0		UL 94
(0.75 mm)	V-0		UL 94
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
UL File Number	E86615		

#### Injection Parameters

	Nominal Value	Units
Drying Time	2.0 to 4.0	hr
Drying Temperature	120	°C
Suggested Max Moisture	0.02	%
Screw Speed	<250	mm/sec
Processing (Melt) Temp	250 to 260	°C
Injection Rate	Slow-Moderate	
Back Pressure	2.00 to 8.00	MPa
Mold Temperature	70 to 90	°C