

Technical Data Sheet

Schuladur A GF15 HF FR1 NATURAL



Polybutylene Terephthalate

Product Description

High flow flame retardent halogenated PBT standard grade reinforced with 15% glass fiber; without PBDE

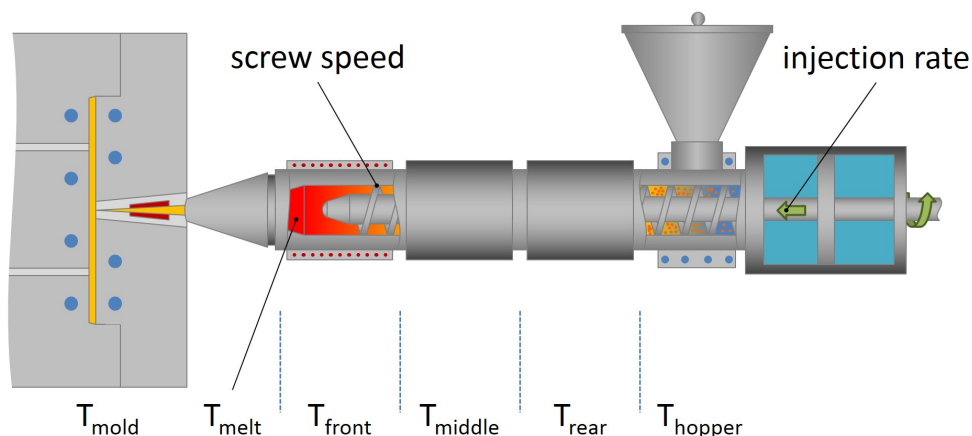
Regulatory Status

For regulatory compliance information, see *Schuladur A GF15 HF FR1 NATURAL* [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

Status	Developmental
Availability	Africa-Middle East; Asia-Pacific; Europe; Latin America; North America
Processing Method	Injection Molding
Attribute	Filled; Good Dimensional Stability; Halogenated; High Flow
Additive	Flame Retardant
Filler/Reinforcement	Glass Fiber, 15%
Resin ID	PBT GF15 FR(17)

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (260 °C/5.0 kg)	50	cm ³ /10 min	ISO 1133
Density, (Method A)	1.52	g/cm ³	ISO 1183
Mechanical			
Tensile Strain at Break, (Type 1A, 5 mm/min)	3.0	%	ISO 527-2
Tensile Stress at Break, (Type 1A, 5 mm/min)	110	MPa	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	6800	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	4.5	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	4.0	kJ/m ²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	34	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise)	30	kJ/m ²	ISO 179
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	201	°C	ISO 306
(A (10N), 50 °C/h)	217	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	211	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	180	°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			
Volume Resistivity	>1.0E+13	ohm*m	IEC 62631-3-1
Dielectric Strength, (in Oil, 1.00 mm, 23 °C, 2000 V/sec)	34	kV/mm	IEC 60243-1
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)	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	29	%	ISO 4589-2
UL Information			
Flame Rating			
(1.5 mm)	V-0		UL 94
(1.5 mm)	5VA		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
(1.5 mm)	5VA		IEC 60695-11-10, -20
(3.0 mm)	V-0		IEC 60695-11-10, -20



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

Notes

These are typical property values not to be construed as specification limits.

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

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