

Technical Data Sheet

Schuladur A1 GF 30 LW CN1 BLK



Polybutylene Terephthalate + PET

Product Description

30% glass fibre reinforced PBT/PET laser weldable compound (IR transperant)

Regulatory Status

For regulatory compliance information, see *Schuladur A1 GF 30 LW CN1 BLK* [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

Status	Commercial: Active
Availability	Africa-Middle East; Asia-Pacific; Europe; Latin America; North America
Processing Method	Injection Molding
Attribute	Laser Weldable
Filler/Reinforcement	Glass Fiber, 30%
Resin ID	(PBT+PET)-GF30

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (260 °C/2.16 kg)	17	cm ³ /10 min	ISO 1133
Density, (Method A)	1.56	g/cm ³	ISO 1183
Mechanical			
Flexural Strain at Flexural Strength	2.5	%	ISO 178
Tensile Strain at Break, (Type 1A, 5 mm/min)	2.1	%	ISO 527-2
Flexural Modulus, (2.0 mm/min)	9700	MPa	ISO 178
Tensile Stress at Break, (Type 1A, 5 mm/min)	140	MPa	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	11000	MPa	ISO 527-1
Flexural Stress, (2.0 mm/min)	200	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	8.0	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	6.0	kJ/m ²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	48	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise)	44	kJ/m ²	ISO 179
Hardness			
Ball Pressure Test, (200 °C)	Pass		IEC 60695-10-2
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	192	°C	ISO 306
(A (10N), 50 °C/h)	215	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	210	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	190	°C	ISO 75-2/A
Electrical			

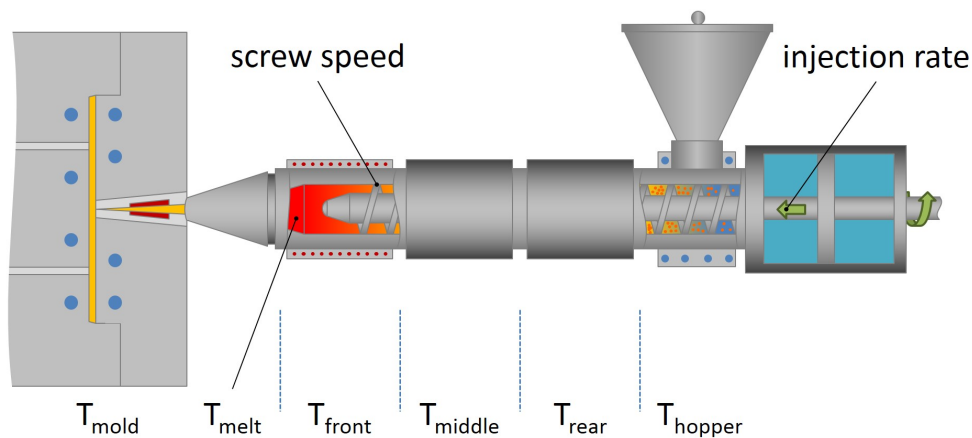
Volume Resistivity	>1.0E+13	ohm*m	IEC 62631-3-1
Comparative Tracking Index (CTI)	175	V	IEC 60112
Surface Resistivity	>1.0E+15	ohm	IEC 60093

Flammable

Burning Rate			
(2.00 mm)	40	mm/min	ISO 3795
(2.00 mm)	40	mm/min	FMVSS 302
Glow Wire Flammability Index			
(1.5 mm)	675	°C	IEC 60695-2-12
(3.0 mm)	675	°C	IEC 60695-2-12
Glow Wire Ignition Temperature			
(1.5 mm)	700	°C	IEC 60695-2-13
(3.0 mm)	700	°C	IEC 60695-2-13

UL Information

Flammability Classification			
(1.5 mm)	HB		IEC 60695-11-10, -20
(3.0 mm)	HB		IEC 60695-11-10, -20



Injection Parameters	Nominal Value	Units
Drying Time	4.0 to 6.0	hr
Drying Temperature	120	°C
Suggested Max Moisture	0.02	%
Processing (Melt) Temp	260 to 280	°C
Mold Temperature	80 to 110	°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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