

Technical Data Sheet

Schulamid 66 MW30 FR4 K2031 NAT



Polyamide 66

Product Description

30% mineral filled flame-retardant Polyamide 66 grade with low warpage; without PBDE

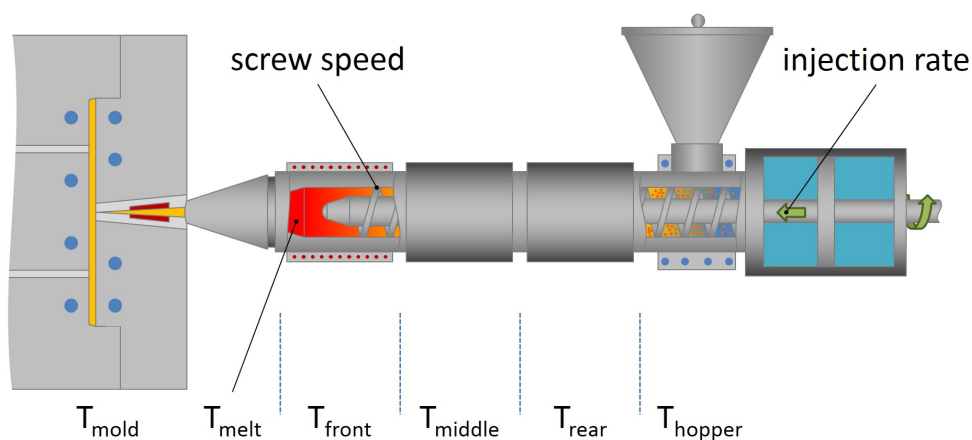
Regulatory Status

For regulatory compliance information, see *Schulamid 66 MW30 FR4 K2031 NAT* [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	Good Strength; Low Warpage
Additive	Flame Retardant
Filler/Reinforcement	Mineral, 30%
Resin ID	PA66 MF30 FR(17)

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.60	g/cm ³	ISO 1183
Mechanical			
Tensile Strain at Break			
(Type 1A, 5 mm/min)	2.0	%	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	6.0	%	ISO 527-2
Tensile Stress at Break			
(Type 1A, 5 mm/min)	80.0	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	40.0	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	9200	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	4500	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	2.0	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	2.0	kJ/m ²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	2.0	kJ/m ²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	23	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise)	12	kJ/m ²	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	33	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)	239	°C	ISO 306
(A (10N), 50 °C/h)	>250	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	236	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	153	°C	ISO 75-2/A
Electrical			
Comparative Tracking Index (CTI)	300	V	IEC 60112
Flammable			
Burning Rate			
(0.750 mm, Self-Extinguishing)	0.0	mm/min	ISO 3795
(1.50 mm, Self-Extinguishing)	0.0	mm/min	ISO 3795
(3.00 mm, Self-Extinguishing)	0.0	mm/min	ISO 3795
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)	875	°C	IEC 60695-2-13
(1.5 mm)	875	°C	IEC 60695-2-13
(3.0 mm)	875	°C	IEC 60695-2-13
Oxygen Index	33	%	ISO 4589-2
UL Information			
Flame Rating			
(1.5 mm)	V-2		UL 94
(3.0 mm)	V-0		UL 94
(0.75 mm)	V-2		UL 94
Flammability Classification			
(0.75 mm)	V-2		IEC 60695-11-10, -20
(1.5 mm)	V-2		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	270 to 290	°C
Back Pressure	20 to 80	bar
Mold Temperature	60 to 100	°C

Notes

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

Processing notes

Melt contacting surfaces should be made of a high quality, corrosive resistant steel. Positive experiences have been made with steel qualities containing > 12% chromium.

Avoid processing at very barrel high temperatures or above the recommended melt temperature range as this can increase risk of deposit onto the tool surfaces. Avoid long residence times. At start and end of production, it is recommended to purge clean with non-flame retardant polymer or a polyolefin.

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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