

Promyde® B30 P2 GFC30

Polyamide 6

NUREL, S.A.

Message:

Promyde® B30 P2 GFC30 is a Polyamide 6 injection moulding grade with 30% glass and heat stabilised. This material is suitable for Food Contact applications.

CHARACTERISTICS

This material is distinguished by high mechanical strength, hardness, rigidity, themostability (melting point 220°C), and resistance to hot lubricants and water. Parts made from Promyde® B30 P2 GFC30 have particularly high dimensional stability and creep strength. This material is suitable for Food Contact applications.

APPLICATIONS

High variety of applications field wherever mechanical properties in combinations with thermal resistance is needed. Glass-fiber reinforced grade are suitable for industrial items such as automotive cooling water tanks, lamp socket housings, fans as well as electrical insulating parts.

General Information	
Filler / Reinforcement	Glass fiber reinforced material, 30% filler by weight
Features	Good dimensional stability
	Moisture resistance
	Rigidity, high
	High strength
	Insulation
	Good creep resistance
	Thermal Stability
	Thermal stability, good
Uses	Compliance of Food Exposure
	Electrical components
	Electrical housing
	Water tank

Physical	Dry	Conditioned	Unit	Test Method
Density (23°C)	1.36	--	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (275°C/5.0 kg)	45.0	--	cm ³ /10min	ISO 1133
Molding Shrinkage				ISO 294-4
Transverse flow	0.40 - 0.45	--	%	ISO 294-4
Flow	0.30 - 0.35	--	%	ISO 294-4
Water Absorption				ISO 62
Saturated, 23°C	6.7	--	%	ISO 62
Equilibrium, 23°C, 50% RH	2.1	--	%	ISO 62
Viscosity Number ¹	145	--	cm ³ /g	ISO 307
Mechanical	Dry	Conditioned	Unit	Test Method

Tensile Modulus (23°C)	9300	6200	MPa	ISO 527-2/1
Tensile Stress (Yield, 23°C)	190	110	MPa	ISO 527-2/50
Tensile Strain (Break, 23°C)	3.0	5.0	%	ISO 527-2/50
Flexural Modulus ² (23°C)	8000	5100	MPa	ISO 178
Flexural Stress ³ (23°C)	250	180	MPa	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-30°C	10	--	kJ/m ²	ISO 179/1eA
23°C	13	25	kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength				ISO 179/1eU
-30°C	75	--	kJ/m ²	ISO 179/1eU
23°C	85	95	kJ/m ²	ISO 179/1eU
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
0.45 MPa, not annealed	215	--	°C	ISO 75-2/B
1.8 MPa, not annealed	210	--	°C	ISO 75-2/A
Melting Temperature (DSC) ⁴	222	--	°C	ISO 3146
Linear thermal expansion coefficient				ISO 11359-2
Flow: 23 to 80°C	2.0E-5	--	cm/cm/°C	ISO 11359-2
Lateral: 23 to 80°C	6.0E-5	--	cm/cm/°C	ISO 11359-2
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	1.0E+13	1.0E+10	ohms	IEC 60093
Volume Resistivity	1.0E+15	1.0E+12	ohms·cm	IEC 60093
Dielectric Constant (1 MHz)	3.80	6.80		IEC 60250
Dissipation Factor (1 MHz)	0.023	0.22		IEC 60250
Comparative Tracking Index	500	--	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating (1.6 mm)	HB	--		UL 94
Injection	Dry	Unit		
Drying Temperature	< 80		°C	
Drying Time	4.0 - 6.0		hr	
Processing (Melt) Temp	260 - 290		°C	
Mold Temperature	40 - 80		°C	
Injection Rate	Moderate-Fast			
Injection instructions				
Back pressure: moderate				
NOTE				
1.	25°C			

2.	2.0 mm/min
3.	2.0 mm/min
4.	10°C/min

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

