Promyde® B30 U

Polyamide 6

NUREL, S.A.

Message:

Promyde B30 U is a Polyamide 6 flame retardant, UL certified, heat stabilised, nucleated and lubricated.
CHARACTERISTICS
Promyde B30 U is an improved flame retardant polyamide 6, UL certified, heat stabilized, lubricated and nucleated for fast cycle injection moulding. Its main characteristics are easy flowing, easy mould filling and very fast cooling time whilst maintaining excellent polyamide 6 mechanical properties.
APPLICATIONS
Due to its improved Glow Wire Flammability Index of 960°C, easy flow characteristics and very fast cooling time; Promyde B30 U is suitable for multi cavity and single cavity injection moulding of flame resistant parts such as components used in automotive, electrical, electronics, or technical parts.

General Information	
UL YellowCard	E341743-101216689
Additive	Nucleating agent heat stabilizer Lubricant Flame retardancy
Features	Nucleated Fast molding cycle Good formability Good liquidity Thermal Stability Lubrication Good demoulding performance Flame retardancy
Uses	Electrical/Electronic Applications Electrical components Engineering accessories Application in Automobile Field
Processing Method	Injection molding

Physical	Dry	Conditioned	Unit	Test Method
Density (23°C)	1.13	--	g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (275°C/5.0 kg)	145	--	cm³/10min	ISO 1133
Molding Shrinkage				
Vertical flow direction	0.80 - 1.1	--	%	
Flow direction	0.90 - 1.1	--	%	
Water Absorption				ISO 62

Saturated, 23°C	9.5	--	%	ISO 62
Equilibrium, 23°C, 50% RH	3.0	--	%	ISO 62
Viscosity Number	145	--	cm^3/g	ISO 307
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus (23°C)	3300	1100	MPa	ISO 527-2/1
Tensile Stress (Yield, 23°C)	85.0	40.0	MPa	ISO 527-2/50
Tensile Strain (Yield, 23°C)	3.5	25	%	ISO 527-2/50
Nominal Tensile Strain at Break (23°C)	18	> 50	%	ISO 527-2/50
Flexural Modulus [1] (23°C)	2800	1000	MPa	ISO 178
Flexural Stress [2] (23°C)	110	30.0	MPa	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength (23°C)	5.0	30	kJ/m^2	ISO 179/1eA
Charpy Unnotched Impact Strength (23°C)	No Break	No Break		ISO 179/1eU
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Heat Deflection Temperature				
0.45 MPa, not annealed	187	--	°C	ISO 75-2/B
1.8 MPa, not annealed	65.0	--	°C	ISO 75-2/A
Melting Temperature (DSC) [3]	222	--	°C	ISO 3146
Linear thermal expansion coefficient				ISO 11359-2
Flow: 23 to 80°C	7.0E-5	--	cm/cm/°C	ISO 11359-2
Lateral: 23 to 80°C	1.0E-4	--	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)	3.50	7.00		IEC 60250
Dissipation Factor (1 MHz)	0.030	0.30		IEC 60250
Comparative Tracking Index	600	--	V	IEC 60112
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Flame Rating (1.50 mm)	V-2	--		UL 94
Glow Wire Flammability Index (1.50 mm)	960	--	°C	IEC 60695-2-12
Glow Wire Ignition Temperature (1.50 mm)	775	--	°C	IEC 60695-2-13
Injection	**Dry**	**Unit**		
Drying Temperature	< 50.0		°C	
Drying Time	4.0 - 6.0		hr	
Processing (Melt) Temp	250 - 270		°C	

Mold Temperature	40.0 - 80.0	°C
Injection Rate	Moderate-Fast	

Injection instructions
Back Pressure: moderate

NOTE	
1.	2.0 mm/min
2.	2.0 mm/min
3.	10°C/min

Recommended distributors for this material

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