

Amilan® CM1016G-30

Polyamide 6
Toray Resin Company

Message:

Amilan® CM1016G-30 is a Polyamide 6 (Nylon 6) product filled with 30% glass fiber. It is available in Asia Pacific, Europe, or North America.
Characteristics include:
Flame Rated
Heat Resistant

General Information				
UL YellowCard		E41797-233420		
Filler / Reinforcement		Glass Fiber,30% Filler by Weight		
Features		Good Thermal Stability		
Part Marking Code		>PA6-GF30<		
Physical	Dry	Conditioned	Unit	Test Method
Density (23°C)	1.36	--	g/cm ³	ISO 1183
Molding Shrinkage				Internal Method
Across Flow : 3.00 mm ¹	0.50 to 0.80	--	%	
Flow : 3.00 mm ²	0.20 to 0.40	--	%	
Water Absorption				ISO 62
23°C, 24 hr	1.1	--	%	
Saturation, 23°C	6.4	--	%	
Hardness	Dry	Conditioned	Unit	Test Method
Rockwell Hardness				ISO 2039-2
M-Scale, 23°C	93	--		
R-Scale, 23°C	120	--		
R-Scale, 80°C	12	--		
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Stress				ISO 527-2
-40°C	250	225	MPa	
23°C	185	105	MPa	
80°C	100	70.0	MPa	
Tensile Strain				ISO 527-2
Break, -40°C	3.0	3.0	%	
Break, 23°C	3.0	4.0	%	
Break, 80°C	4.0	4.5	%	
Flexural Modulus				ISO 178
-40°C	11800	9800	MPa	
23°C	9500	5100	MPa	
80°C	4700	3500	MPa	
Flexural Stress				ISO 178

-40°C	325	315	MPa	
23°C	280	145	MPa	
80°C	155	105	MPa	
Compressive Stress				ISO 604
-40°C	250	210	MPa	
23°C	180	120	MPa	
80°C	95.0	70.0	MPa	
Shear Strength (23°C)	85.0	--	MPa	ASTM D732
Taber Abrasion Resistance (1000 Cycles)	0.350	--	mg	ISO 9352
Coefficient of Friction - vs. Metal ³	0.150	--		Suzuki Method
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179
-40°C	10	17	kJ/m ²	
23°C	15	23	kJ/m ²	
Charpy Unnotched Impact Strength				ISO 179
-40°C	70	80	kJ/m ²	
23°C	80	100	kJ/m ²	
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature (0.45 MPa, Unannealed)	224	--	°C	ISO 75-2/B
Melting Temperature	225	--	°C	DSC
CLTE - Flow	2.0E-5 to 3.0E-5	--	cm/cm/°C	ISO 11359-2
Specific Heat	1600	--	J/kg/°C	
Thermal Conductivity	0.38	--	W/m/K	
Electrical	Dry	Conditioned	Unit	Test Method
Volume Resistivity	1.0E+15	1.0E+12	ohms·cm	IEC 60093
Electric Strength	20	18	kV/mm	IEC 60243-1
Dielectric Constant ⁴				IEC 60250
23°C, 50 Hz	4.90	10.7		
23°C, 1 kHz	4.60	7.90		
23°C, 1 MHz	4.00	4.30		
Dissipation Factor ⁵				IEC 60250
23°C, 50 Hz	0.030	0.17		
23°C, 1 kHz	0.030	0.18		
23°C, 1 MHz	0.030	0.070		
Arc Resistance ⁶	131	137	sec	UL 746
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating (0.794 mm)	HB	--		UL 94
NOTE				

1.	80x80x3
2.	80x80x3mm
3.	Without Lubrication
4.	60% RH
5.	60% RH
6.	Tungsten Electrode

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

