Grilon® BG-50 S

Polyamide 6

EMS-GRIVORY

Message:

Grilon® BG-50 S is a Polyamide 6 (Nylon 6) material filled with 50% glass fiber. It is available in Africa & Middle East, Asia Pacific, Europe, Latin America, or North America for injection molding.
Important attributes of Grilon® BG-50 S are:
Flame Rated
RoHS Compliant
Good Aesthetics
Typical applications include:
Automotive
Appliances
Electrical/Electronic Applications

General Information	
UL YellowCard	E53898-243862
Filler / Reinforcement	Glass Fiber,50% Filler by Weight
Features	Good Surface Finish
Uses	Appliance Components Automotive Applications Automotive Interior Parts Electrical/Electronic Applications
RoHS Compliance	RoHS Compliant
Forms	Granules
Processing Method	Injection Molding
Multi-Point Data	Isothermal Stress vs. Strain (ISO 11403-1) Secant Modulus vs. Strain (ISO 11403-1) Shear Modulus vs. Temperature (ISO 11403-1) Viscosity vs. Shear Rate (ISO 11403-2)

Physical	Dry	Conditioned	Unit	Test Method
Density	1.58	--	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.50	--	%	
Flow	0.10	--	%	
Water Absorption				ISO 62
Saturation, 23°C	5.0	--	%	
Equilibrium, 23°C, 50% RH	1.5	--	%	
Hardness	**Dry**	**Conditioned**	**Unit**	**Test Method**
Ball Indentation Hardness	270	155	MPa	ISO 2039-1

Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	17500	11500	MPa	ISO 527-2
Tensile Stress (Break)	245	165	MPa	ISO 527-2
Tensile Strain (Break)	3.0	6.0	%	ISO 527-2
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-30°C	11	12	kJ/m²	
23°C	15	25	kJ/m²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-30°C	85	90	kJ/m²	
23°C	90	95	kJ/m²	
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Heat Deflection Temperature				
1.8 MPa, Unannealed	210	--	°C	ISO 75-2/A
8.0 MPa, Unannealed	170	--	°C	ISO 75-2/C
Continuous Use Temperature				Internal Method
-- [1]	90.0 to 140	--	°C	
-- [2]	160	--	°C	
Melting Temperature [3]	222	--	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow	1.5E-5	--	cm/cm/°C	
Transverse	1.0E-4	--	cm/cm/°C	
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Surface Resistivity	--	1.0E+12	ohms	IEC 60093
Volume Resistivity	1.0E+14	1.0E+14	ohms·cm	IEC 60093
Electric Strength	40	37	kV/mm	IEC 60243-1
Comparative Tracking Index	--	575	V	IEC 60112
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Flammability Classification (0.800 mm)	HB	--		IEC 60695-11-10, -20
Additional Information	**Dry**	**Conditioned**		**Test Method**
ISO Type	PA 6, MH, 14-190, GF50	--		ISO 1874
NOTE				
1.	Long Term			
2.	Short Term			
3.	10°C/min			

Recommended distributors for this material

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