Grilamid® LV-5H

Polyamide 12

EMS-GRIVORY

Message:

Grilamid® LV-5H is a Polyamide 12 (Nylon 12) 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 Grilamid® LV-5H are:
Flame Rated
RoHS Compliant
Heat Stabilizer
Typical applications include:
Automotive
Electrical/Electronic Applications
Appliances
Consumer Goods
Engineering/Industrial Parts

General Information	
UL YellowCard	E53898-102161396
Filler / Reinforcement	Glass Fiber,50% Filler by Weight
Additive	Heat Stabilizer
Features	Heat Stabilized Hydrolysis Resistant
Uses	Appliance Components Automotive Applications Connectors Consumer Applications Electrical/Electronic Applications Engineering Parts Household Goods Hydraulic Applications Industrial Applications Medical Devices Pneumatic Applications Power/Other Tools Sporting Goods
RoHS Compliance	RoHS Compliant
Forms	Granules
Processing Method	Injection Molding
Multi-Point Data	Shear Modulus vs. Temperature (ISO 11403-1) Viscosity vs. Shear Rate (ISO 11403-2)

Physical	Dry	Conditioned	Unit	Test Method
Density	1.47	--	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.50	--	%	
Flow	0.10	--	%	
Water Absorption				ISO 62
Saturation, 23°C	0.80	--	%	
Equilibrium, 23°C, 50% RH	0.40	--	%	
Hardness	**Dry**	**Conditioned**	**Unit**	**Test Method**
Shore Hardness (Shore D, 15 sec)	--	82		ISO 868
Ball Indentation Hardness	--	155	MPa	ISO 2039-1
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	12000	11500	MPa	ISO 527-2
Tensile Stress (Break)	155	135	MPa	ISO 527-2
Tensile Strain (Break)	5.0	6.0	%	ISO 527-2
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-30°C	15	15	kJ/m²	
23°C	19	20	kJ/m²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-30°C	90	80	kJ/m²	
23°C	90	80	kJ/m²	
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Heat Deflection Temperature				
1.8 MPa, Unannealed	165	--	°C	ISO 75-2/A
8.0 MPa, Unannealed	125	--	°C	ISO 75-2/C
Continuous Use Temperature				Internal Method
-- [1]	90.0 to 120	--	°C	
-- [2]	150	--	°C	
Melting Temperature [3]	178	--	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow	1.5E-5	--	cm/cm/°C	
Transverse	1.2E-4	--	cm/cm/°C	
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Surface Resistivity	--	1.0E+12	ohms	IEC 60093
Volume Resistivity	--	1.0E+13	ohms·cm	IEC 60093
Electric Strength	--	35	kV/mm	IEC 60243-1

Comparative Tracking Index	--	600	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	PA12, MHR, 18-120, GF50	--		ISO 1874
NOTE				
1.	Long Term			
2.	Short Term			
3.	10°C/min			

Recommended distributors for this material

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