Grilamid® XE 4106 nat

Polyamide 6/12 Copolymer

EMS-GRIVORY

Message:

Grilamid® XE 4106 nat is a Polyamide 6/12 Copolymer (Nylon 6/12) material. It is available in Asia Pacific, Europe, or North America for injection molding.
Important attributes of Grilamid® XE 4106 nat are:
Flame Rated
Chemical Resistant
Typical applications include:
Automotive
Electrical/Electronic Applications
Appliances
Consumer Goods
Engineering/Industrial Parts

General Information	
Features	Alcohol Resistant
	Hydrolysis Resistant
Uses	Appliance Components
	Automotive Applications
	Automotive Exterior Parts
	Automotive Interior Parts
	Connectors
	Consumer Applications
	Electrical/Electronic Applications
	Engineering Parts
	Household Goods
	Hydraulic Applications
	Industrial Applications
	Pneumatic Applications
	Power/Other Tools
	Sporting Goods
Appearance	Natural Color
Forms	Granules
Processing Method	Injection Molding

Physical	Dry	Conditioned	Unit	Test Method
Density	1.30	--	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.90	--	%	
Flow	0.30	--	%	
Water Absorption				ISO 62

Saturation, 23°C	2.0	--	%	
Equilibrium, 23°C, 50% RH	0.90	--	%	
Hardness	**Dry**	**Conditioned**	**Unit**	**Test Method**
Ball Indentation Hardness	185	145	MPa	ISO 2039-1
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	9500	7500	MPa	ISO 527-2
Tensile Stress (Break)	150	115	MPa	ISO 527-2
Tensile Strain (Break)	4.5	6.5	%	ISO 527-2
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-30°C	10	10	kJ/m²	
23°C	15	16	kJ/m²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-30°C	95	90	kJ/m²	
23°C	90	90	kJ/m²	
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Heat Deflection Temperature				
1.8 MPa, Unannealed	185	--	°C	ISO 75-2/A
8.0 MPa, Unannealed	110	--	°C	ISO 75-2/C
Continuous Use Temperature				Internal Method
-- [1]	90.0 to 120	--	°C	
-- [2]	180	--	°C	
Melting Temperature [3]	215	--	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow	3.0E-5	--	cm/cm/°C	
Transverse	1.0E-4	--	cm/cm/°C	
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Surface Resistivity	--	1.0E+11	ohms	IEC 60093
Volume Resistivity	1.0E+12	1.0E+12	ohms·cm	IEC 60093
Electric Strength	36	36	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	PA612, MHR, 18-090, GF30	--		ISO 1874
NOTE				
1.	Long Term			

2.	Short Term
3.	10°C/min

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