Grilon® ELX 50 HNZ

Polyamide 6X

EMS-GRIVORY

Message:

Grilon® ELX 50 HNZ is a Polyamide 6X (Nylon 6X) material. It is available in Africa & Middle East, Asia Pacific, Europe, Latin America, or North America for blow molding or extrusion.
Important attributes of Grilon® ELX 50 HNZ are:
Flame Rated
RoHS Compliant
Heat Stabilizer
High Viscosity
Impact Modified
Typical applications include:
Automotive
Consumer Goods
Electrical/Electronic Applications
Hose/Tubing
Industrial Applications

General Information	
Additive	Heat Stabilizer Impact Modifier
Features	Heat Stabilized High Viscosity Impact Modified
Uses	Automotive Applications Blow Molding Applications Consumer Applications Electrical/Electronic Applications Hydraulic Applications Industrial Applications Pneumatic Applications Tubing Wire & Cable Applications
RoHS Compliance	RoHS Compliant
Forms	Granules
Processing Method	Blow Molding Extrusion
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	1.01	--	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.80	--	%	
Flow	0.70	--	%	
Water Absorption				ISO 62
Saturation, 23°C	6.5	--	%	
Equilibrium, 23°C, 50% RH	2.0	--	%	
Hardness	**Dry**	**Conditioned**	**Unit**	**Test Method**
Shore Hardness (Shore D, 15 sec)	50	47		ISO 868
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	220	150	MPa	ISO 527-2
Tensile Stress (50% Strain)	16.0	12.0	MPa	ISO 527-2
Tensile Strain (Break)	> 50	> 50	%	ISO 527-2
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-30°C	No Break	No Break		
23°C	No Break	No Break		
Charpy Unnotched Impact Strength				ISO 179/1eU
-30°C	No Break	No Break		
23°C	No Break	No Break		
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Heat Deflection Temperature				
0.45 MPa, Unannealed	50.0	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	35.0	--	°C	ISO 75-2/A
Continuous Use Temperature				Internal Method
-- [1]	100 to 120	--	°C	
-- [2]	180	--	°C	
Melting Temperature [3]	210	--	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow	1.6E-4	--	cm/cm/°C	
Transverse	1.7E-4	--	cm/cm/°C	
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Surface Resistivity	--	1.0E+10	ohms	IEC 60093
Volume Resistivity	1.0E+11	1.0E+10	ohms·cm	IEC 60093

Electric Strength	29	30	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	PA6/X-HI, BGH, 32-002	--		ISO 1874
NOTE				
1.	Long Term			
2.	Short Term			
3.	10°C/min			

Recommended distributors for this material

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