

Grilamid® XE 3841 nat

Polyamide 12

EMS-GRIVORY

Message:

Grilamid® XE 3841 nat is a Polyamide 12 (Nylon 12) material. It is available in Africa & Middle East, Asia Pacific, Europe, Latin America, or North America for extrusion.

Important attributes of Grilamid® XE 3841 nat are:

Flame Rated

RoHS Compliant

Food Contact Acceptable

Good Flexibility

Impact Resistant

Typical applications include:

Food Contact Applications

Consumer Goods

Engineering/Industrial Parts

Household Applications

Industrial Applications

General Information				
Features		Food Contact Acceptable		
		Good Flexibility		
		High Impact Resistance		
Uses		Consumer Applications		
		Engineering Parts		
		Household Goods		
		Hydraulic Applications		
		Industrial Applications		
		Pneumatic Applications		
Agency Ratings		EU Food Contact, Unspecified Rating		
		FDA Food Contact, Unspecified Rating		
RoHS Compliance		RoHS Compliant		
Appearance		Natural Color		
Forms		Granules		
Processing Method		Extrusion		
Physical	Dry	Conditioned	Unit	Test Method
Density	0.990	--	g/cm ³	ISO 1183
Water Absorption				ISO 62
Saturation, 23°C	1.1	--	%	
Equilibrium, 23°C, 50% RH	0.60	--	%	
Hardness	Dry	Conditioned	Unit	Test Method

Shore Hardness (Shore D, 15 sec)	--	53		ISO 868
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	--	350	MPa	ISO 527-2
Tensile Stress				ISO 527-2
Yield	--	20.0	MPa	
Break	--	30.0	MPa	
Tensile Strain (Yield)	--	15	%	ISO 527-2
Nominal Tensile Strain at Break	--	> 50	%	ISO 527-2
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-30°C	--	No Break		
23°C	--	No Break		
Charpy Unnotched Impact Strength				ISO 179/1eU
-30°C	--	No Break		
23°C	--	No Break		
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
0.45 MPa, Unannealed	45.0	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	40.0	--	°C	ISO 75-2/A
Continuous Use Temperature				Internal Method
-- ¹	80.0 to 100	--	°C	
-- ²	130	--	°C	
Melting Temperature ³	178	--	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow	1.0E-4	--	cm/cm/°C	
Transverse	1.6E-4	--	cm/cm/°C	
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	--	1.0E+12	ohms	IEC 60093
Volume Resistivity	--	1.0E+12	ohms·cm	IEC 60093
Electric Strength	--	43	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 12-HI, EH; 18-005	--		ISO 1874
NOTE				
1.	Long Term			

- | | |
|----|------------|
| 2. | Short Term |
| 3. | 10°C/min |

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

