

Grilamid® L 25 nat

Polyamide 12

EMS-GRIVORY

Message:

Grilamid® L 25 nat is a Polyamide 12 (Nylon 12) material. It is available in Africa & Middle East, Asia Pacific, Europe, Latin America, or North America for cast film, extrusion, film extrusion, or injection molding.

Important attributes of Grilamid® L 25 nat are:

- RoHS Compliant
- Food Contact Acceptable
- High Viscosity

Typical applications include:

- Automotive
- Film
- Medical/Healthcare
- Food Contact Applications
- Consumer Goods

General Information			
UL YellowCard	E53898-243837	E132701-100536654	E132701-237870
Features	Food Contact Acceptable		
	High Viscosity		
Uses	Cast Film		
	Consumer Applications		
	Film		
	Industrial Applications		
	Medical Devices		
	Medical/Healthcare Applications		
	Non-oriented Film		
	Packaging		
Agency Ratings	EU Food Contact, Unspecified Rating		
	FDA Food Contact, Unspecified Rating		
	USP Class VI		
RoHS Compliance	RoHS Compliant		
Appearance	Natural Color		
Forms	Granules		
Processing Method	Cast Film		
	Extrusion		
	Film Extrusion		
	Injection Molding		
Multi-Point Data	Isochronous Stress vs. Strain (ISO 11403-1)		

Isothermal Stress vs. Strain (ISO 11403-1)

Secant Modulus vs. Strain (ISO 11403-1)

Shear Modulus vs. Temperature (ISO 11403-1)

Specific Volume vs Temperature (ISO 11403-2)

Viscosity vs. Shear Rate (ISO 11403-2)

Physical	Dry	Conditioned	Unit	Test Method
Density	1.01	--	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (275°C/5.0 kg)	20.0	--	cm ³ /10min	ISO 1133
Water Absorption				ISO 62
Saturation, 23°C	1.5	--	%	
Equilibrium, 23°C, 50% RH	0.70	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1400	1100	MPa	ISO 527-2
Tensile Stress				ISO 527-2
Yield	45.0	40.0	MPa	
Break	50.0	45.0	MPa	
Tensile Strain (Yield)	10	12	%	ISO 527-2
Nominal Tensile Strain at Break	> 50	> 50	%	ISO 527-2
Films	Dry	Conditioned	Unit	Test Method
Tensile Stress				ISO 527-3
MD : Yield	35.0	--	MPa	
TD : Yield	35.0	--	MPa	
MD : Break	80.0	--	MPa	
TD : Break	70.0	--	MPa	
Tensile Elongation				ISO 527-3
MD : Yield	6.0	--	%	
TD : Yield	6.0	--	%	
MD : Break	850	--	%	
TD : Break	900	--	%	
Elmendorf Tear Strength				ISO 6383-2
MD	10	--	N	
TD	10	--	N	
Trouser Tear Resistance				ISO 6383-1
MD	20.0	--	N/mm	
TD	25.0	--	N/mm	
Water Vapor Transmission Rate (23°C, 85% RH)	8.0	--	g/m ² /24 hr	DIS 15106-1/-2
Oxygen Transmission Rate				DIS 15105-1/-2
23°C ¹	350	--	cm ³ /m ² /bar/24 hr	

23°C ²	370	--	cm ³ /m ² /bar/24 hr	
Carbon Dioxide Transmission Rate				DIS 15105-1/-2
23°C ³	1600	--	cm ³ /m ² /bar/24 hr	
23°C ⁴	1500	--	cm ³ /m ² /bar/24 hr	
Gelboflex test	1300	--	holes/m ²	Internal Method
ISO Type	PA 12, E, 24-010	--		ISO 1874
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-30°C	--	7.0	kJ/m ²	
23°C	--	10	kJ/m ²	
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
Melting Temperature ⁵	178	--	°C	ISO 11357-3
Optical	Dry	Conditioned		Test Method
Gloss (60°)	150	--		ISO 2813
NOTE				
1.	0% RH			
2.	85% RH			
3.	85% RH			
4.	0% RH			
5.	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



WECHAT