

VESTAMID® L L2121

Polyamide 12
Evonik Industries AG

Message:

Plasticized polyamide 12 compounds
Characterization: high viscosity, plasticized, light- and heat-stabilized, with processing aid
Application Examples: fuel, vacuum, and hydraulic clutch lines, steel cable sheathing
The properties of PA 12 compounds can be modified to suit the requirements of many applications by incorporating various additives such as stabilizers, plasticizers, reinforcements, and fillers.
The VESTAMID® L compounds of Evonik comprise a range of various products that are customized to the requirements of processors and users. Many of the PA 12 compounds are suitable especially for the injection molding of recision parts; others have been developed specifically for the extrusion process.

General Information	
Additive	Heat Stabilizer
	Plasticizer
	Processing Aid
	UV Stabilizer
Features	Fatigue Resistant
	Food Contact Acceptable
	Fuel Resistant
	Good Abrasion Resistance
	Good Impact Resistance
	Good Processability
	Grease Resistant
	Heat Stabilized
	High ESCR (Stress Crack Resist.)
	High Viscosity
	Light Stabilized
	Low to No Water Absorption
	Oil Resistant
	Plasticized
	Solvent Resistant
	Sound Damping
	Vibration Damping
Uses	Cable Jacketing
	Fuel Lines
	Hydraulic Applications
Agency Ratings	EU 10/2011
Processing Method	Extrusion

Physical	Nominal Value	Unit	Test Method
Density (23°C)	1.02	g/cm ³	ISO 1183
Molding Shrinkage			ISO 294-4
Across Flow	1.7	%	
Flow	0.60	%	
Water Absorption (Equilibrium, 23°C, 50% RH)	0.60	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	700	MPa	ISO 527-2
Tensile Stress (Yield)	35.0	MPa	ISO 527-2
Tensile Strain			ISO 527-2
Yield	20	%	
Break	> 50	%	
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-30°C, Complete Break	7.0	kJ/m ²	
23°C, Complete Break	40	kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-30°C	No Break		
23°C	No Break		
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature			
0.45 MPa, Unannealed	110	°C	ISO 75-2/B
1.8 MPa, Unannealed	45.0	°C	ISO 75-2/A
Vicat Softening Temperature			
--	170	°C	ISO 306/A
--	130	°C	ISO 306/B
Melting Temperature ¹	176	°C	ISO 11357-3
CLTE - Flow (23 to 55°C)	1.6E-4	cm/cm/°C	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+14	ohms · cm	IEC 60093
Electric Strength	34	kV/mm	IEC 60243-1
Relative Permittivity			IEC 60250
23°C, 100 Hz	6.50		
23°C, 1 MHz	3.40		
Dissipation Factor			IEC 60250
23°C, 100 Hz	0.19		
23°C, 1 MHz	0.055		
Comparative Tracking Index			IEC 60112
--	600	V	
Solution A ²	> 600	V	
Flammability	Nominal Value	Unit	Test Method

Flame Rating		UL 94
1.60 mm	HB	
3.20 mm	HB	
Additional Information	Nominal Value	Test Method
Electrolytical Corrosion	A1	IEC 60426
ISO Shortname	PA12-P, EHL, 22-007	ISO 1874
NOTE		
1.	2nd Heating	
2.	50 drops value	

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