VESTAMID® L L2123

Polyamide 12

Evonik Industries AG

Message:

Plasticized polyamide 12 compounds

Characterization: high viscosity, plasticized, light- and heat-stabilized, with processing aid, increased cold impact strength

Application Examples: air brake line systems

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				
	Agency Ratings	EU 10/2011								
	Processing Method	Extrusion								
	Physical	Nominal Value	Unit	Test Method						
Density (23°C)	1.03	g/cm ³	ISO 1183							
Molding Shrinkage			ISO 294-4							
Across Flow	1.4	%								

Flow	0.65	%	
Water Absorption (Equilibrium, 23°C, 50% RH)	0.60	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	370	MPa	ISO 527-2
Tensile Stress (Yield)	24.0	MPa	ISO 527-2
Tensile Strain			ISO 527-2
Yield	32	%	
Break	> 50	%	
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-30°C, Complete Break	13	kJ/m²	
23°C, Partial Break	120	kJ/m²	
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	80.0	°C	ISO 75-2/B
1.8 MPa, Unannealed	45.0	°C	ISO 75-2/A
Vicat Softening Temperature			
	165	°C	ISO 306/A
	120	°C	ISO 306/B
Melting Temperature ¹	171	°C	ISO 11357-3
CLTE - Flow (23 to 55°C)	1.8E-4	cm/cm/°C	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+12	ohms•cm	IEC 60093
Electric Strength	29	kV/mm	IEC 60243-1
Relative Permittivity			IEC 60250
23°C, 100 Hz	10.0		
23°C, 1 MHz	3.60		
Dissipation Factor			IEC 60250
23°C, 100 Hz	0.20		
23°C, 1 MHz	0.11		
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	НВ		
3.20 mm	НВ		
Additional Information	Nominal Value		Test Method

Electrolytical Corrosion	A1	IEC 60426
ISO Shortname	PA12-P, EHL, 22-004	ISO 1874
NOTE		
1.	2nd Heating	
2.	50 drops value	

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