

Product Texts

High viscosity, heat and light stabilized PA12 Compound

VESTAMID® L2140 NC is a heat- and light- stabilized polyamide 12 compound for the extrusion of tubing (e.g. fuel lines) and semi-finished products. Tubing according to DIN 73 378, Type: PA 12-HL.

Properties of compounds based on PA12 vary little with changing humidity due to low moisture absorption. Parts made of this semi-crystalline material are characterized by exceptional impact strength, low coefficient of friction and good chemical resistance.

Pigmentation may affect values.

Inside the original and undamaged packaging, the product has a shelf life of at least 2 years when stored in dry rooms at temperatures not exceeding 30°C.

For information about processing of VESTAMID®, please follow the general commendations about "[Processing of VESTAMID® compounds](#)".

The values presented are typical or average values, they do not constitute a specification.

FOR FURTHER INFORMATION PLEASE CONTACT US AT EVONIK-HP@EVONIK.COM
OR VISIT OUR PRODUCT AT WWW.VESTAMID.COM

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melt volume-flow rate, MVR	3 / *	cm ³ /10min	ISO 1133
Temperature	220 / *	°C	-
Load	5 / *	kg	-
^[C] Molding shrinkage, parallel	0.7 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	1.2 / *	%	ISO 294-4, 2577
^[C] Density of melt	860	kg/m ³	-
^[C] Thermal conductivity of melt	0.2	W/(m K)	-
^[C] Spec. heat capacity of melt	3000	J/(kg K)	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	1500 / 1200	MPa	ISO 527
^[C] Yield stress	44 / 38	MPa	ISO 527
^[C] Yield strain	4 / 11	%	ISO 527
^[C] Nominal strain at break	>50 / >50	%	ISO 527
^[C] Charpy impact strength, +23°C	N / N	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	N / N	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	35 / 55	kJ/m ²	ISO 179/1eA
^[C] Type of failure	C / C	-	-
^[C] Charpy notched impact strength, -30°C	9 / 10	kJ/m ²	ISO 179/1eA
^[C] Type of failure	C / C	-	-
^[C] Shore D hardness	75 / *	-	ISO 7619-1

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	178 / *	°C	ISO 11357-1/-3
^[C] Glass transition temperature, 10°C/min	45 / *	°C	ISO 11357-1/-2
^[C] Temp. of deflection under load, 1.80 MPa	50 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	110 / *	°C	ISO 75-1/-2
^[C] Vicat softening temperature, B	140 / *	°C	ISO 306
^[C] Coeff. of linear therm. expansion, parallel	140 / *	E-6/K	ISO 11359-1/-2

^[C] Coeff. of linear therm. expansion, normal	140 / *	E-6/K	ISO 11359-1/-2
^[C] Burning Behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	-
Yellow Card available	yes / *	-	-
^[C] Burning Behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	0.8 / *	mm	-
Yellow Card available	yes / *	-	-

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 100Hz	3.7 / 5	-	IEC 62631-2-1
^[C] Relative permittivity, 1MHz	3 / 3.4	-	IEC 62631-2-1
^[C] Dissipation factor, 100Hz	450 / 800	E-4	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	260 / 500	E-4	IEC 62631-2-1
^[C] Volume resistivity	1E13 / 3E12	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	* / 1E15	Ohm	IEC 62631-3-2
^[C] Electric strength	- / 28	kV/mm	IEC 60243-1
^[C] Comparative tracking index	600 / 600	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	1.6 / *	%	Sim. to ISO 62
^[C] Humidity absorption	0.8 / *	%	Sim. to ISO 62
^[C] Density	1010 / 1010	kg/m ³	ISO 1183

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
ISO Data			
^[C] Injection Molding, melt temperature	240	°C	ISO 294
Injection Molding, mold temperature	60	°C	ISO 294
Injection Molding, injection velocity	200	mm/s	ISO 294
Injection Molding, pressure at hold	70	MPa	ISO 294

[C]: CAMPUS

Characteristics

Processing

Injection Molding, Pipe/Tube Extrusion, Profile Extrusion, Other Extrusion

Delivery form

Pellets, Natural Color

Additives

Lubricants

Special Characteristics

High impact or impact modified, Light stabilized or stable to light, Heat stabilized or stable to heat

Features

Tribologic Grade

Chemical Resistance

General Chemical Resistance

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa