

Product Texts

High-viscosity, plasticized compound for extrusion with an extraordinary long-term heat resistance

VESTAMID® LX9013 BK 9.7507 is a plasticized polyamide 12 compound with an especially high long-term resistance under thermal load.

The material absorbs only little moisture, thus leading to nearly unaffected dimensions and properties of the finished parts at changing ambient conditions. Extruded tubes are impact-resistant also at low temperatures.

VESTAMID® LX9013 BK 9.7507 is suited to produce flexible tubes that are permanently exposed to higher temperatures, e.g., in the engine compartment of motor vehicles. Especially when used as diesel fuel lines they show significant advantages compared with standard grades, obvious in storage tests with diesel fuel (see the figure).

The material corresponds to the extrusion compound PA12-HIPHL, grade1 acc. DIN 73378 and meets the requirements acc. DIN 74324 (black), ISO 7628 and SAE J844.

VESTAMID® LX9013 BK 9.7507 is supplied as pellets in moisture-proof packaging ready for processing.

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] Molding shrinkage, parallel	0.4 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	1.5 / *	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	410 / 400	MPa	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	130 / 140	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	7 / 20	kJ/m ²	ISO 179/1eA
^[C] Type of failure	C / C	-	-
^[C] Shore D hardness	65 / *	-	ISO 7619-1

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	172 / *	°C	ISO 11357-1/-3
^[C] Glass transition temperature, 10°C/min	0 / *	°C	ISO 11357-1/-2
^[C] Temp. of deflection under load, 1.80 MPa	55 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	130 / *	°C	ISO 75-1/-2
^[C] Vicat softening temperature, B	130 / *	°C	ISO 306
^[C] Coeff. of linear therm. expansion, parallel	160 / *	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	160 / *	E-6/K	ISO 11359-1/-2
^[C] Burning Behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	1.6 / *	mm	-

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 100Hz	12 / 15.6	-	IEC 62631-2-1
^[C] Relative permittivity, 1MHz	3.4 / 3.6	-	IEC 62631-2-1
^[C] Dissipation factor, 100Hz	5000 / 6650	E-4	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	1000 / 1390	E-4	IEC 62631-2-1
^[C] Volume resistivity	1E8 / 5.1E7	Ohm*m	IEC 62631-3-1
^[C] Electric strength	25 / 23	kV/mm	IEC 60243-1
^[C] Comparative tracking index	600 / -	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	1.5 / *	%	Sim. to ISO 62
^[C] Humidity absorption	0.6 / *	%	Sim. to ISO 62
^[C] Density	1020 / 1020	kg/m ³	ISO 1183

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
ISO Data			
^[C] Injection Molding, melt temperature	220	°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

Pipe/Tube Extrusion, Profile Extrusion, Other Extrusion

Delivery form

Pellets, Black

Additives

Plasticizer

Special Characteristics

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

Regional Availability

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