

Product Texts

Conductive, heat-stabilized and light-resistant polyamide 12 compound for the extrusion coating of steel tubing

VESTAMID® LX9112 BK is a heat-stabilized, conductive polyamide 12 compound, especially developed for the pore-free extrusion coating of steel tubing.

Compared to commonly use conductive extrusion compounds VESTAMID® LX9112 BK is distinguished by a significant lower melt viscosity and respectively by outstanding extrusion characteristics even in very thin coatings.

Steel tubing coated with VESTAMID® LX9112 BK meet the requirements of the US automotive industry to prevent electrostatic charge caused by flowing liquid fuels.

Due to the excellent impact strength and the good abrasion and chemical resistance of polyamide 12 the seamless coating with VESTAMID® LX9112 BK improves the corrosion resistance of steel tubing significantly.

VESTAMID® LX9112 BK is supplied as cylindrical pellets, ready for processing in moisture-proof packaging. The use of colorants may affect property 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	34 / *	cm³/10min	ISO 1133
Temperature	240 / *	°C	-
Load	10 / *	kg	-
^[C] Molding shrinkage, parallel	1.2 / *	%	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	2120 / 1690	MPa	ISO 527
^[C] Yield stress	54 / 48	MPa	ISO 527
^[C] Yield strain	4 / 13	%	ISO 527
^[C] Nominal strain at break	32 / >50	%	ISO 527
^[C] Charpy impact strength, +23°C	N / N	kJ/m²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	N / N	kJ/m²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	4 / 3	kJ/m²	ISO 179/1eA
^[C] Type of failure	C / C	-	-
^[C] Charpy notched impact strength, -30°C	3 / 3	kJ/m²	ISO 179/1eA
^[C] Type of failure	C / C	-	-

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	176 / *	°C	ISO 11357-1/-3
^[C] Glass transition temperature, 10°C/min	44 / *	°C	ISO 11357-1/-2
^[C] Temp. of deflection under load, 1.80 MPa	52 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	150 / *	°C	ISO 75-1/-2

^[C] Vicat softening temperature, B	156 / *	°C	ISO 306
^[C] Coeff. of linear therm. expansion, parallel	105 / *	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	124 / *	E-6/K	ISO 11359-1/-2

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Volume resistivity	43000 / 29000	Ohm*m	IEC 62631-3-1

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	1.11 / *	%	Sim. to ISO 62
^[C] Humidity absorption	0.65 / *	%	Sim. to ISO 62
^[C] Density	1120 / -	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

[C]: CAMPUS

Characteristics

Processing

Other Extrusion, Coating

Delivery form

Pellets, Black

Special Characteristics

Increased electrical conductivity, Anti-static, High impact or impact modified, Light stabilized or stable to light, Heat stabilized or stable to heat

Chemical Resistance

General Chemical Resistance

Regional Availability

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