

**Product Texts**

**Plasticized, impact resistance polyamide 12 compound for injection molding**

VESTAMID® L-R3-MHI BK is a medium viscosity heat and light-stabilized PA 12 compound for the injection molding process. Furthermore it is antistatic and contains a processing aid for a fast and even form filling.

VESTAMID® L-R3-MHI BK offers a good impact resistance at low temperatures.

VESTAMID® L-R3-MHI BK is supplied as cylindrical granules, ready for processing, in moisture-proof bags. The processing temperature during the extrusion process should be within a range of 230°C to 270°C.

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](mailto:EVONIK-HP@EVONIK.COM)  
OR VISIT OUR PRODUCT AT [WWW.VESTAMID.COM](http://WWW.VESTAMID.COM)

<b>Processing/Physical Characteristics</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
<sup>[C]</sup> Melt volume-flow rate, MVR	<b>10 / *</b>	cm <sup>3</sup> /10min	ISO 1133
Temperature	<b>275 / *</b>	°C	-
Load	<b>5 / *</b>	kg	-
<sup>[C]</sup> Molding shrinkage, parallel	<b>1.4 / *</b>	%	ISO 294-4, 2577
<sup>[C]</sup> Molding shrinkage, normal	<b>1.6 / *</b>	%	ISO 294-4, 2577
<sup>[C]</sup> Density of melt	<b>940</b>	kg/m <sup>3</sup>	-
<sup>[C]</sup> Thermal conductivity of melt	<b>0.16</b>	W/(m K)	-
<sup>[C]</sup> Spec. heat capacity of melt	<b>2550</b>	J/(kg K)	-
<sup>[C]</sup> Ejection temperature	<b>180</b>	°C	-

[C]: CAMPUS

<b>Mechanical properties</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	<b>1640 / -</b>	MPa	ISO 527
<sup>[C]</sup> Yield stress	<b>38 / -</b>	MPa	ISO 527
<sup>[C]</sup> Yield strain	<b>5 / -</b>	%	ISO 527
<sup>[C]</sup> Nominal strain at break	<b>30 / -</b>	%	ISO 527
<sup>[C]</sup> Charpy impact strength, +23°C	<b>N / -</b>	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy impact strength, -30°C	<b>N / -</b>	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy notched impact strength, +23°C	<b>44 / -</b>	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Charpy notched impact strength, -30°C	<b>15 / -</b>	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Type of failure	<b>C / -</b>	-	-

[C]: CAMPUS

<b>Thermal properties</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
<sup>[C]</sup> Melting temperature, 10°C/min	<b>178 / *</b>	°C	ISO 11357-1/-3

<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	<b>50 / *</b>	°C	ISO 75-1/-2
<sup>[C]</sup> Temp. of deflection under load, 0.45 MPa	<b>130 / *</b>	°C	ISO 75-1/-2
<sup>[C]</sup> Vicat softening temperature, B	<b>140 / *</b>	°C	ISO 306
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	<b>180 / *</b>	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Burning Behav. at 1.5 mm nom. thickn.	<b>HB / *</b>	class	IEC 60695-11-10
Thickness tested	<b>1.6 / *</b>	mm	-

[C]: CAMPUS

<b>Electrical properties</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
<sup>[C]</sup> Volume resistivity	<b>6 / -</b>	Ohm*m	IEC 62631-3-1

[C]: CAMPUS

<b>Other properties</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<sup>[C]</sup> Water absorption	<b>1.5 / *</b>	%	Sim. to ISO 62
<sup>[C]</sup> Humidity absorption	<b>0.8 / *</b>	%	Sim. to ISO 62
<sup>[C]</sup> Density	<b>1100 / -</b>	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

<b>Test specimen production</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
<sup>[C]</sup> Injection Molding, melt temperature	<b>250</b>	°C	ISO 294
Injection Molding, mold temperature	<b>80</b>	°C	ISO 294
Injection Molding, injection velocity	<b>200</b>	mm/s	ISO 294
Injection Molding, pressure at hold	<b>70</b>	MPa	ISO 294

[C]: CAMPUS

**Characteristics**

**Processing**

Injection Molding

**Delivery form**

Pellets, Black

**Additives**

Lubricants, Plasticizer

**Special Characteristics**

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

**Regional Availability**

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