VESTAMID® L-R2-GF25 BK

PA12-GF25 Evonik Operations GmbH

Product Texts

Glassfiber reinforced (25%), electrically conductive PA12 resin

VESTAMID® L-R2-GF25 BK glass fiber-reinforced, electrically conductive polyamide 12 for injection molding process, especially for molded parts for explosion-protected equipment and systems.

The parts based on PA 12 absorb only small amounts of water and components made of this material therefore show excellent dimensional stability under changing ambient humidity. The resistance values of the finished parts are dependent on the processing conditions.

VESTAMID® L-R2-GF25 BK is supplied as cylindrical granules ready for processing in moisture-proof polyethylene containers.

The use of colorants may change 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	**80 / ***	cm³/10min	ISO 1133
Temperature	**275 / ***	°C	-
Load	**21.6 / ***	kg	-
[C] Molding shrinkage, parallel	**0.3 / ***	%	ISO 294-4, 2577
[C] Molding shrinkage, normal	**0.8 / ***	%	ISO 294-4, 2577
[C] Density of melt	**1020**	kg/m³	-
[C] Thermal conductivity of melt	**0.24**	W/(m K)	-
[C] Spec. heat capacity of melt	**2020**	J/(kg K)	-
[C] Ejection temperature	**180**	°C	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**6800 / -**	MPa	ISO 527
[C] Charpy impact strength, +23°C	**75 / -**	kJ/m²	ISO 179/1eU
[C] Type of failure	**C / -**	-	-
[C] Charpy impact strength, -30°C	**70 / -**	kJ/m²	ISO 179/1eU
[C] Type of failure	**C / -**	-	-
[C] Charpy notched impact strength, +23°C	**10 / -**	kJ/m²	ISO 179/1eA
[C] Type of failure	**C / -**	-	-
[C] Charpy notched impact strength, -30°C	**11 / -**	kJ/m²	ISO 179/1eA
[C] Type of failure	**C / -**	-	-

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Melting temperature, 10°C/min	**178 / ***	°C	ISO 11357-1/-3
[C] Temp. of deflection under load, 1.80 MPa	**170 / ***	°C	ISO 75-1/-2
[C] Temp. of deflection under load, 0.45 MPa	**175 / ***	°C	ISO 75-1/-2
[C] Vicat softening temperature, B	**170 / ***	°C	ISO 306
[C] Coeff. of linear therm. expansion, parallel	**100 / ***	E-6/K	ISO 11359-1/-2

[C] Coeff. of linear therm. expansion, normal	**80 / ***	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	-
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] Volume resistivity	**21 / -**	Ohm*m	IEC 62631-3-1

[C]: CAMPUS

Other properties	**dry / cond**	**Unit**	**Test Standard**
[C] Water absorption	**1.2 / ***	%	Sim. to ISO 62
[C] Humidity absorption	**0.5 / ***	%	Sim. to ISO 62
[C] Density	**1270 / -**	kg/m³	ISO 1183

[C]: CAMPUS

Test specimen production	**Value**	**Unit**	**Test Standard**
ISO Data			
[C] Injection Molding, melt temperature	**250**	°C	ISO 294
Injection Molding, mold temperature	**80**	°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

Delivery form
Pellets, Black

Special Characteristics
Increased electrical conductivity, 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