VESTAMID® DX9321 BK E70164

PA612-I-GF20 Evonik Operations GmbH

Product Texts

Molding compound based on nylon 612 specially suitable for plastic and rubber composites

VESTAMID® DX9321 BK E70164 is a heat-stabilized, glass fiber-reinforced and impact-modified PA 612 compound.

The material contains about 20 % glass fibers, an ageing protective agent and processing aid for a fast and even form filling. VESTAMID® DX9321 BK E70164 is especially suitable for the production of plastic and rubber composites.

Parts of VESTAMID® DX9321 BK E70164 can be directly bonded to rubber,e.g., XNBR, HNBR, AEM or FPM, without using any adhesives or adhesion promoters ("direct-bonding to rubber").

Because of its semi-crystallinemorphology VESTAMID® DX9321 BK E70164 provides an excellent chemical resistance. e.g., against greases, oils, fuels and hydraulic fluids.

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 recommendations 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	**7 / ***	cm³/10min	ISO 1133
Temperature	**230 / ***	°C	-
Load	**5 / ***	kg	-
[C] Molding shrinkage, parallel	**0.7 / ***	%	ISO 294-4, 2577
[C] Molding shrinkage, normal	**0.9 / ***	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**5700 / 4700**	MPa	ISO 527
[C] Yield stress	*** / 90**	MPa	ISO 527
[C] Yield strain	*** / 5**	%	ISO 527
[C] Nominal strain at break	*** / 10**	%	ISO 527
[C] Stress at break	**115 / ***	MPa	ISO 527
[C] Strain at break	**4.6 / ***	%	ISO 527
[C] Charpy impact strength, +23°C	**93 / 93**	kJ/m²	ISO 179/1eU
[C] Type of failure	**C / C**	-	-
[C] Charpy impact strength, -30°C	**106 / 102**	kJ/m²	ISO 179/1eU
[C] Type of failure	**C / C**	-	-
[C] Charpy notched impact strength, +23°C	**18 / 19**	kJ/m²	ISO 179/1eA
[C] Type of failure	**C / C**	-	-
[C] Charpy notched impact strength, -30°C	**11 / 11**	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	**215 / ***	°C	ISO 11357-1/-3

[C] Temp. of deflection under load, 1.80 MPa	**189 / ***	°C	ISO 75-1/-2
[C] Temp. of deflection under load, 0.45 MPa	**208 / ***	°C	ISO 75-1/-2
[C] Vicat softening temperature, B	**207 / ***	°C	ISO 306
[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	**4.4 / -**	-	IEC 62631-2-1
[C] Relative permittivity, 1MHz	**3.1 / -**	-	IEC 62631-2-1
[C] Dissipation factor, 100Hz	**500 / -**	E-4	IEC 62631-2-1
[C] Dissipation factor, 1MHz	**470 / -**	E-4	IEC 62631-2-1
[C] Volume resistivity	**1E12 / -**	Ohm*m	IEC 62631-3-1
[C] Comparative tracking index	**600 / -**	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
[C] Water absorption	**2 / ***	%	Sim. to ISO 62
[C] Humidity absorption	**0.8 / ***	%	Sim. to ISO 62
[C] Density	**1190 / 1190**	kg/m³	ISO 1183

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
ISO Data			
[C] Injection Molding, melt temperature	**260**	°C	ISO 294
Injection Molding, mold temperature	**80**	°C	ISO 294
Injection Molding, injection velocity	**200**	mm/s	ISO 294

[C]: CAMPUS

Characteristics

Processing
Injection Molding

Delivery form
Pellets, Black

Additives
Release agent

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

Features
Good Adhesion

Chemical Resistance
General Chemical Resistance, Grease Resistance, Oil Resistance

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