VESTAMID® DX9304 BK E70238

PA612-I | Evonik Operations GmbH

Product Texts

High-viscosity, heat- and light-stabilized, impact-modified polyamide 612 compound for extrusion

VESTAMID® DX9304 BK E70238 is a PA 612 extrusion compound developed for the manufacturing of tubing systems with higher demands on heat resistance.

The melting point of VESTAMID® DX9304 BK E70238, about 35 °C higher than PA 11 and PA 12 compounds, allows higher temperatures in use. The compound is especially suitable for the extrusion of tubing systems that are exposed to high burst pressures at high service temperatures, e.g. hydraulic clutch lines.

The material absorbs only little moisture. Therefore dimensions and properties of parts are nearly unaffected through ambient conditions.

The process temperatures should be in the range of 240-270°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 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	**280 / ***	°C	-
Load	**5 / ***	kg	-
[C] Molding shrinkage, parallel	**2.1 / ***	%	ISO 294-4, 2577
[C] Molding shrinkage, normal	**1.2 / ***	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**1850 / 1200**	MPa	ISO 527
[C] Yield stress	**50 / 41**	MPa	ISO 527
[C] Yield strain	**5 / 20**	%	ISO 527
[C] Nominal strain at break	**41 / >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	**40 / 95**	kJ/m²	ISO 179/1eA
[C] Charpy notched impact strength, -30°C	**30 / 18**	kJ/m²	ISO 179/1eA
[C] Type of failure	**C / C**	-	-
[C] Shore D hardness	**75 / ***	-	ISO 7619-1

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Melting temperature, 10°C/min	**213 / ***	°C	ISO 11357-1/-3
[C] Temp. of deflection under load, 1.80 MPa	**50 / ***	°C	ISO 75-1/-2
[C] Temp. of deflection under load, 0.45 MPa	**170 / ***	°C	ISO 75-1/-2
[C] Vicat softening temperature, B	**175 / ***	°C	ISO 306

[C] Coeff. of linear therm. expansion, parallel	**150 / ***	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	**4.1 / -**	-	IEC 62631-2-1
[C] Relative permittivity, 1MHz	**3.2 / -**	-	IEC 62631-2-1
[C] Dissipation factor, 100Hz	**560 / -**	E-4	IEC 62631-2-1
[C] Dissipation factor, 1MHz	**310 / -**	E-4	IEC 62631-2-1
[C] Volume resistivity	**3.2E12 / 1.8E10**	Ohm*m	IEC 62631-3-1
[C] Electric strength	**39 / 38**	kV/mm	IEC 60243-1
[C] Comparative tracking index	**600 / -**	-	IEC 60112

[C]: CAMPUS

Other properties	**dry / cond**	**Unit**	**Test Standard**
[C] Water absorption	**2.7 / ***	%	Sim. to ISO 62
[C] Humidity absorption	**1.3 / ***	%	Sim. to ISO 62
[C] Density	**1040 / 1040**	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

[C]: CAMPUS

Characteristics

Processing
Pipe/Tube Extrusion, Profile Extrusion

Delivery form
Pellets, Black

Special Characteristics
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