

Product Texts

Heat- and weather-resistant, impact-modified polyamide 612 elastomer for extrusion

VESTAMID® EX9350 BK E70293 is a PA 612 elastomer extrusion compound developed for the manufacturing of tubing systems, e.g. vacuum brake booster lines.

The compound is in particular suitable for applications, that require a continuous high flexibility even if subjected to high temperature load. In contrast to conventionally plasticized materials (plasticizerloss) tubes made from VESTAMID® EX9350 BK E70293 do not stiffen under elevated temperatures.

In comparison with PA 11 and PA 12 compounds the increased melting point allows for increased peak temperatures in use.

The compound is especially suitable for the extrusion of tubing systems that are exposed to increased burst pressures and service temperatures.

The process temperatures should be within a range of 210 to 240 °C.

VESTAMID® EX9350 BK E70293 is supplied as cylindrical pellets in moisture-proof packaging, ready for use.

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
OR VISIT OUR PRODUCT AT WWW.VESTAMID.COM

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melt volume-flow rate, MVR	56 / *	cm ³ /10min	ISO 1133
Temperature	280 / *	°C	-
Load	2.16 / *	kg	-
^[C] Molding shrinkage, parallel	1.1 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	1.0 / *	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	630 / 480	MPa	ISO 527
^[C] Yield stress	30 / 26	MPa	ISO 527
^[C] Yield strain	30 / 31	%	ISO 527
^[C] Nominal strain at break	>50 / >50	%	ISO 527
^[C] Charpy impact strength, +23°C	N / N	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	N / N	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	30 / 130	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	8 / 6	kJ/m ²	ISO 179/1eA
^[C] Type of failure	C / C	-	-
^[C] Shore D hardness	67 / *	-	ISO 7619-1

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	198 / *	°C	ISO 11357-1/-3
^[C] Glass transition temperature, 10°C/min	-4 / *	°C	ISO 11357-1/-2
^[C] Temp. of deflection under load, 1.80 MPa	50 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	130 / *	°C	ISO 75-1/-2
^[C] Vicat softening temperature, B	130 / *	°C	ISO 306
^[C] Coeff. of linear therm. expansion, parallel	122 / *	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	140 / *	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	8.3 / -	-	IEC 62631-2-1
^[C] Relative permittivity, 1MHz	3.4 / -	-	IEC 62631-2-1
^[C] Dissipation factor, 100Hz	2940 / -	E-4	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	616 / -	E-4	IEC 62631-2-1
^[C] Volume resistivity	8.6E8 / 6E7	Ohm*m	IEC 62631-3-1
^[C] Electric strength	35 / 26	kV/mm	IEC 60243-1
^[C] Comparative tracking index	575 / -	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	1.1 / *	%	Sim. to ISO 62
^[C] Humidity absorption	3.5 / *	%	Sim. to ISO 62
^[C] Density	1050 / -	kg/m ³	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, Other Extrusion

Delivery form

Pellets, Black

Special Characteristics

High impact or impact modified, Light stabilized or stable to light, U.V. stabilized or stable to weather, Heat stabilized or stable to heat

Regional Availability

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