

Product Texts

Especially developed for the production of plastic-rubber composites according to the Evonik Industries K K Process

VESTAMID® X7099 NC is a PA 612 resin especially developed for the production of plastic-rubber composites.

Parts made from VESTAMID® X7099 can be, without the use of adhesives or adhesion promoters, covulcanized with rubbers, such as XNBR, HNBR, AEM or FPM ("direct-bonding to rubber").

As a partially crystalline resin VESTAMID® X7099 exhibits an outstanding chemical resistance, especially against fuels, oils and fats. In comparison to resins based on PA 66 or PA 6 VESTAMID® X7099 has a distinctly lower water absorption.

VESTAMID® X7099 is supplied as cylindrical pellets ready for use in a moisture-proof packaging.

The use of colorants may affect 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] Molding shrinkage, parallel	0.6 / *	%	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	5800 / -	MPa	ISO 527
^[C] Yield stress	125 / -	MPa	ISO 527
^[C] Yield strain	3.9 / -	%	ISO 527
^[C] Nominal strain at break	4.4 / -	%	ISO 527
^[C] Charpy impact strength, +23°C	80 / -	kJ/m ²	ISO 179/1eU
^[C] Type of failure	C / -	-	-
^[C] Charpy impact strength, -30°C	60 / -	kJ/m ²	ISO 179/1eU
^[C] Type of failure	C / -	-	-
^[C] Charpy notched impact strength, +23°C	10 / -	kJ/m ²	ISO 179/1eA
^[C] Type of failure	C / -	-	-
^[C] Charpy notched impact strength, -30°C	7 / -	kJ/m ²	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	215 / *	°C	ISO 11357-1/-3
^[C] Temp. of deflection under load, 1.80 MPa	190 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	210 / *	°C	ISO 75-1/-2
^[C] Vicat softening temperature, B	205 / *	°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	3.9 / -	-	IEC 62631-2-1
^[C] Dissipation factor, 100Hz	650 / -	E-4	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	430 / -	E-4	IEC 62631-2-1
^[C] Volume resistivity	1E12 / -	Ohm*m	IEC 62631-3-1

[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	1200 / -	kg/m ³	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, Natural Color

Special Characteristics

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