

Product Texts

High-viscosity, heat- and light-stabilized Polyamide 610 Compound for extrusion

VESTAMID® Terra HS2211 BK E70405 is a polyamide 610 compound developed for the manufacturing of tubing systems with higher demands on heat resistance.

The melting range of VESTAMID® Terra HS2211 BK E70405 is about 40°C higher than PA 11 and PA 12 compounds and allows higher peak 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 process temperatures should be within a range of 240°C to 270°C.

VESTAMID® Terra HS2211 is delivered as cylindrical granules ready for processing in moisture-proof packaging.

VESTAMID® Terra HS is partly based on renewable raw materials and fills the performance gap between the commodity and the niche long-chain nylons.

VESTAMID® Terra HS is the polycondensation product of 1,6-hexamethylene diamine (H) and 1,10-decanedioic acid (sebacic acid—S). Because sebacic acid is derived from castor oil, VESTAMID® Terra HS is a material that is partly based on bio-based and renewable resources.

The use of colorants may affect property values.

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.TERRA.COM

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melt volume-flow rate, MVR	19 / *	cm ³ /10min	ISO 1133
Temperature	275 / *	°C	-
Load	5 / *	kg	-
^[C] Molding shrinkage, parallel	1.6 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	1.3 / *	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	2500 / -	MPa	ISO 527
^[C] Yield stress	66 / -	MPa	ISO 527
^[C] Yield strain	4 / -	%	ISO 527
^[C] Nominal strain at break	>50 / -	%	ISO 527
^[C] Charpy impact strength, +23°C	N / -	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	N / -	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	5 / -	kJ/m ²	ISO 179/1eA
^[C] Type of failure	C / -	-	-
^[C] Charpy notched impact strength, -30°C	5 / -	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	222 / *	°C	ISO 11357-1/-3
^[C] Glass transition temperature, 10°C/min	42 / *	°C	ISO 11357-1/-2
^[C] Temp. of deflection under load, 1.80 MPa	54 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	155 / *	°C	ISO 75-1/-2

[C] Vicat softening temperature, B	195 / *	°C	ISO 306
[C] Coeff. of linear therm. expansion, parallel	95 / *	E-6/K	ISO 11359-1/-2
[C] Coeff. of linear therm. expansion, normal	94 / *	E-6/K	ISO 11359-1/-2

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
[C] Water absorption	3.5 / *	%	Sim. to ISO 62
[C] Humidity absorption	1.7 / *	%	Sim. to ISO 62
[C] Density	1060 / -	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, Other Extrusion

Delivery form

Pellets, Granules, Black

Additives

Release agent

Special Characteristics

Light stabilized or stable to light, Heat stabilized or stable to heat

Certifications

Contains renewable resources

Regional Availability

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