

Product Information

VESTAMID® *Terra* DS18–GF30

Medium viscosity, easily demoldable, glass fiber-reinforced, heat-stabilized polyamide 1010 compound for injection molding

VESTAMID *Terra* DS18–GF30 is a 30 % glass fiber-reinforced, easily demoldable and heat-stabilized polyamide 1010 compound.

Due to its mold release properties, VESTAMID *Terra* DS18–GF30 is suitable for the efficient production of injection molded parts with short cycle times.

The parts are characterized by exceptional heat deflection temperature, a high durability and a good dimensional stability.

VESTAMID *Terra* DS18–GF30 is supplied as cylindrical granules, ready for processing, in moisture-proof bags.

VESTAMID® Terra is a group of new polyamides, the monomers for which are based entirely or partly on renewable raw materials.

VESTAMID® Terra DS is the polycondensation product of 1,10-decamethylene diamine (D) and 1,10-decanedioic acid (sebacic acid—S). Because both monomers are extracted from castor oil, VESTAMID® Terra DS is a material that is based 100% on natural resources.

Property	Test method		Unit	VESTAMID Terra DS18-GF30	
	international	national			
Density	23°C	ISO 1183	DIN EN ISO 1183	g/cm ³	1.29
Tensile test		ISO 527-1	DIN EN ISO 527-1		
Stress at yield		ISO 527-2	DIN EN ISO 527-2	MPa	136
Strain at yield				%	4
Strain at break				%	5
Tensile modulus		ISO 527-1	DIN EN ISO 527-1	MPa	7400
		ISO 527-2	DIN EN ISO 527-2		
CHARPY impact strength		ISO 179/1eU	DIN EN ISO 179/1eU		
	23°C			kJ/m ²	95 C ¹⁾
	-30°C			kJ/m ²	96 C ¹⁾
CHARPY notched impact strength		ISO 179/1eA	DIN EN ISO 179/1eA		
	23°C			kJ/m ²	19 C ¹⁾
	-30°C			kJ/m ²	11 C ¹⁾
Vicat softening temperature		ISO 306	DIN EN ISO 306		
Method A	10 N			°C	201
Method B	50 N			°C	196
Water absorption		ISO 62	DIN EN ISO 62		
	saturation			%	1.4
Viscosity number		ISO 307	DIN EN ISO 307	cm ³ /g	180
Melting range		ISO 11357			
DSC	2 nd heating			°C	206
Percentage of Renewable Carbon (calculation)		ASTM 6866		%	100
Global Warming Potential (GWP)*		Evonik, PE International		kg CO ₂ equivalents/ kg material	3.3

The results shown have been generated from a low number of production lots. Therefore, they are preliminary and not yet the result of a statistical evaluation. Therefore they must not be used to establish specifications.

*preliminary data

¹⁾ C = Complete break, incl. hinge break H