Product Information

VESTAMID® *Terra* DS16-GF30

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

VESTAMID *Terra* DS16-GF30 is a 30 % glass fiber-reinforced, easily demoldable and heat-stabilized polyamide 1010 compound.

Due to its mold release properties, VESTAMID *Terra* DS16-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* DS16-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.

For further information, please contact our experts in the department Market Development of the High Performance Polymers Business Line.

Property		Test method international	national	Unit	VESTAMID *Terra* DS16-GF30
Density	23°C	ISO 1183	DIN EN ISO 1183	g/cm³	1.29
Tensile test		ISO 527-1 ISO 527-2	DIN EN ISO 527-1 DIN EN ISO 527-2		
Stress at yield				MPa	130
Strain at yield				%	5
Strain at break				%	5
Tensile modulus		ISO 527-1 ISO 527-2	DIN EN ISO 527-1 DIN EN ISO 527-2	MPa	7500
CHARPY impact strength		ISO 179/1eU	DIN EN ISO 179/1eU		
	23°C			kJ/m²	100 C[1)]
	-30°C			kJ/m²	100 C[1)]
CHARPY notched impact strength		ISO 179/1eA	DIN EN ISO 179/1eA		
	23°C			kJ/m²	19 C[1)]
	-30°C			kJ/m²	12 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	cm³/g	160
Melting range		ISO 11357			
DSC	2nd 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

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