

Product Information

VESTAMID® *Terra* DD-G16

Medium viscosity, easy-flowing polyamide 1012 resin

VESTAMID *Terra* DD-G16 is an unmodified, easy-flowing, tough-improved PA 1012 resin for injection molding or modification by a compounding process.

Due to its semi-crystalline morphology VESTAMID *Terra* DD-G16 provides an excellent chemical resistance, e.g., against greases, oils, fuels and hydraulic fluids.

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

VESTAMID® Terra DD-G16 is a development product of the VESTAMID® Terra DD product range. VESTAMID® Terra DD is the polycondensation product of 1,10-decamethylene diamine (D) and 1,12-dodecanedioic acid (D). Because both monomers are extracted from plant oils, VESTAMID® Terra DD-G is a material that is based 100% on natural resources.

Property		Test method		Unit	VESTAMID Terra DD-G16
		international	national		
Density	23°C	ISO 1183	DIN EN ISO 1183	g/cm ³	1.03
Tensile test		ISO 527-1	DIN EN ISO 527-1		
Stress at yield		ISO 527-2	DIN EN ISO 527-2	MPa	40
Strain at yield				%	5
Strain at break				%	> 50
Tensile modulus	23°C	ISO 527-1	DIN EN ISO 527-1	MPa	1300
		ISO 527-2	DIN EN ISO 527-2		
CHARPY impact strength		ISO 179/1eU	DIN EN ISO 179/1eU		
	23°C			kJ/m ²	N ¹⁾
	-30°C			kJ/m ²	N ¹⁾
CHARPY notched impact strength		ISO 179/1eA	DIN EN ISO 179/1eA		
	23°C			kJ/m ²	12 C ¹⁾
	-30°C			kJ/m ²	16 C ¹⁾
Vicat softening temperature		ISO 306	DIN EN ISO 306		
Method A	10 N			°C	188
Method B	50 N			°C	168
Water absorption		ISO 62	DIN EN ISO 62		
	saturation			%	1.6
Viscosity number		ISO 307	DIN EN ISO 307	cm ³ /g	160
Melting range		ISO 11357			
DSC	2 nd heating			°C	190
Percentage of Renewable Carbon (calculation)		ASTM 6866		%	100

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.

¹⁾ C = Complete break, incl. hinge break H
N = No break