

## Product Information

### VESTAMID® HT*plus* M3033

#### Polyphthalamide based on PA10T

VESTAMID HT*plus* M3033 is a PA 10T-based, black colored, glass-fiber reinforced (30%), heat-stabilized copolyamide. PA 10T is a poly-condensation product of 1,10-decamethylene diamine (10) and terephthalic acid (T). As 1,10-decamethylene diamine is derived from castor oil plants, VESTAMID HT*plus* M3033 is partially natural resourced and thus bio-based.

Compared to PA 6T-based resins VESTAMID HT*plus* M3033 has a broader processing window as well as a reduced tendency to absorb water. Therefore the material exhibits less variation in mechanical properties and dimensional changes with humidity.

This resin is especially suited for manufacturing parts subjected to high temperature.

VESTAMID HT*plus* M3033 is supplied as spherical pellets in polyethylene packaging.

Drying at 120°C for at least 4 hours before processing is recommended.

Property	Test method		Unit	VESTAMID HTplus M3033	
	international	national			
Density	23°C	ISO 1183	DIN EN ISO 1183	g/cm <sup>3</sup>	1.36
Tensile test		ISO 527-1	DIN EN ISO 527-1		
Stress at break		ISO 527-2	DIN EN ISO 527-2	MPa	169
Strain at break				%	2.4
Tensile modulus		ISO 527-1	DIN EN ISO 527-1	MPa	9400
		ISO 527-2	DIN EN ISO 527-2		
CHARPY impact strength		ISO 179/1eU	DIN EN ISO 179/1eU		
	23°C			kJ/m <sup>2</sup>	56 C <sup>1)</sup>
	-40°C			kJ/m <sup>2</sup>	52 C <sup>1)</sup>
CHARPY notched impact strength		ISO 179/1eA	DIN EN ISO 179/1eA		
	23°C			kJ/m <sup>2</sup>	8.6 C <sup>1)</sup>
	-40°C			kJ/m <sup>2</sup>	7.5 C <sup>1)</sup>
Temperature of deflection under load		ISO 75-1	DIN EN ISO 75-1		
		ISO 75-2	DIN EN ISO 75-2		
Method A	1.8 MPa			°C	263
Method B	0.45 MPa			°C	284
Melting point		ISO 11357			
DSC	2 <sup>nd</sup> heating			°C	approx. 285

Pigmentation may affect values.

<sup>1)</sup> C = Complete break, incl. hinge break H