

## Product Information

### Preliminary Product Information

#### VESTAMID® HT*plus* M1533

Glass-fiber reinforced, internally lubricated polyphthalamide compound

VESTAMID HT*plus* M1533 is a glass-fiber reinforced (30%) polyphthalamide compound (PPA) containing an internal lubricant. The resin is especially used in tribological applications. The modification reduces the sliding frictions. Therefore the material is suitable for improved wear applications, and in addition to manufacture parts subjected to high temperature.

VESTAMID HT*plus* M1533 is supplied as cylindrical pellets in polyethylene packaging.

Drying at 110°C for at least 3 hours before processing is recommended.

The optimum melt temperature is 310°C. We recommend a mold temperature of 130°C.

Property	Test method		Unit	VESTAMID HTplus M1533	
	international	national			
Density	23°C	ISO 1183	DIN EN ISO 1183	g/cm <sup>3</sup>	1.53
Tensile test		ISO 527-1	DIN EN ISO 527-1		
Stress at break		ISO 527-2	DIN EN ISO 527-2	MPa	175
Strain at break				%	2
Tensile modulus		ISO 527-1	DIN EN ISO 527-1	MPa	11000
		ISO 527-2	DIN EN ISO 527-2		
Izod impact strength		ISO 180/1A	DIN EN ISO 180/1A		
	23°C			kJ/m <sup>2</sup>	45 C <sup>1)</sup>
notched	23°C			kJ/m <sup>2</sup>	7.5 C <sup>1)</sup>
Wear factor K		Thrust washer		cm <sup>3</sup> min/kg m h	25
Coeff. of friction (static)			ASTM D-1894	-	0.33
Coeff. of friction (dynamic)			ASTM D-1894	-	0.28
Heat distortion temperature			ASTM D-648		
Method A				°C	255
Melting range		ISO 11357			
DSC	2 <sup>nd</sup> heating			°C	300-315

Pigmentation may affect values.

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

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.