

Provisional Technical Information

## VESTAMID® HT*plus* M1063 black



### Carbon fiber-reinforced polyphthalamide compound

VESTAMID® HT*plus* M1063 black is a carbon fiber-reinforced (30%), polyphthalamide compound (PPA), exhibiting high stiffness.

This compound is for manufacturing parts subjected to high temperature.

VESTAMID® HT*plus* M1063 black is supplied as cylindrical pellets in polyethylene packaging.

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

We recommend a melt temperature between 310°C and 340°C. The mold temperature should be within a range of 140°C to 180°C.

**Properties of VESTAMID® HTplus M1063 black**

Properties		Test method	Unit	Value
Density	23°C	ISO 1183	g/cm <sup>3</sup>	1.32
Tensile test		ISO 527-1		
Stress at break		ISO 527-2	MPa	240
Strain at break			%	1.2
Tensile modulus		ISO 527-1 ISO 527-2	MPa	24000
CHARPY impact strength		ISO 179/1eU		
	23°C		kJ/m <sup>2</sup>	45 C <sup>1)</sup>
	-40°C		kJ/m <sup>2</sup>	40 C <sup>1)</sup>
CHARPY notched impact strength		ISO 179/1eA		
	23°C		kJ/m <sup>2</sup>	7 C <sup>1)</sup>
	-40°C		kJ/m <sup>2</sup>	6.5 C <sup>1)</sup>
Surface resistance R <sub>0A</sub>		IEC 60167	Ohm	1000
Temperature of deflection under load				
Method A	1.8 MPa	ISO 75-1	°C	282
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.