EVONIK INDUSTRIES

Product Information

Preliminary Product Information

VESTAMID® HT*plus* R1133

Glass-fiber reinforced polyphthalamide compound especially suitable for plastic and rubber composites

VESTAMID HT*plus* R1133 is a glass-fiber reinforced (30%), heat-stabilized polyphthalamide compound (PPA) especially suitable for the production of rubber and plastic composites. This process is patented by Evonik Degussa GmbH.

Parts of VESTAMID HT*plus* R1133 can be directly bonded to rubber, e. g., HNBR or FPM, without using any adhesives or adhesion promotors.

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

VESTAMID HT*plus* R1133 is supplied as cylindrical pellets in polyethylene packaging.

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

Property		Test method international	national	Unit	VESTAMID HT*plus* R1133
Density	23°C	ISO 1183	DIN EN ISO 1183	g/cm³	1.40
Tensile test		ISO 527-1	DIN EN ISO 527-1		
Stress at break		ISO 527-2	DIN EN ISO 527-2	MPa	145
Strain at break				%	2
Tensile modulus		ISO 527-1 ISO 527-2	DIN EN ISO 527-1 DIN EN ISO 527-2	MPa	11000
CHARPY impact strength		ISO 179/1eU	DIN EN ISO 179/1eU		
	23°C			kJ/m²	28 C[1)]
	-40°C			kJ/m²	21 C[1)]
CHARPY notched impact strength		ISO 179/1eA	DIN EN ISO 179/1eA		
	23°C			kJ/m²	6 C[1)]
	-40°C			kJ/m²	7 C[1)]
Temperature of deflection under load		ISO 75-1 ISO 75-2	DIN EN ISO 75-1 DIN EN ISO 75-2		
Method A	1.8 MPa			°C	244
Method B	0.45 MPa			°C	296
Melting range		ISO 11357			
DSC	2nd heating			°C	300-315

Pigmentation may affect values.

[1)] 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.