VESTAPE®

Provisional Technical Information

VESTAPE® PA12-CF45 10641

High chemical resistance, low water absorption, damage resistant

Tape Properties	Unit	Value	Standard
Polymer	-	polyamide 12	-
Fiber	-	HT carbon fiber	-
Fiber volume fraction	% by vol.	45	EN 2559
Fiber weight fraction	% by weight	59	EN 2559
Tape areal weight	g/m²	343	
Tape density	g/cm³	1.36	ISO 1183
Tape thickness	mm	0.25	-
Tape width	mm	160	-
Laminate properties			
Tensile modulus (0°)	GPa	100	ISO 527
Tensile strength (0°)	MPa	1750	ISO 527
In plane shear modulus G12	GPa	1.4	ISO 14129
In plane shear strength τ_{12M}	MPa	30	ISO 14129
Processing properties			
Melt temperature	°C	app. 176	ISO 11357
Glass transition temperature	°C	app. 45	ISO 11357
Typical processing temperature	°C	210-240	

* (1)measured on 8 layer plies. Note: Laminate values might differ.

Processing via Hot Transfer Pressing optimized for shortest cycle time.

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.

Evonik Resource Efficiency GmbH
High Performance Polymers
45674 Marl/Germany

Phone +49 2365 49-9878
evonik-hp@evonik.com
www.evonik.com/composites

EVONIK
POWER TO CREATE