

Product Data Sheet EP GC 204 HF

1210121

Property	Method of testing	Unit	max. or min.	Ref. Value IEC 60893-3-2	Test value (median)
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Mechanical properties

Flexural stress at rupture perpendicular to laminations	ISO 178	MPa	min.	340	A 532,67 B 453,35
Apparent modulus of elasticity in flexure	ISO 178	MPa	min.	22000*	A 21590 B 21205
Compressive strength perpendicular to laminations	ISO 604	MPa	min.	350*	523,36
Impact strength (Charpy) parallel to laminations	ISO 179/3C	kJ/m ²	min.	50	92,51
Shearing strength parallel to laminations	VDE 0318/2	MPa	min.	30*	
Tensile strength	ISO 527-4	MPa	min.	300*	A 355,90 B 310,86

Electrical properties

Electric strength at 90°C in oil perpendicular to laminations	IEC 60243-1	kV/mm	min.	10,2**	13,29
Breakdown voltage at 90°C in oil parallel to laminations	IEC 60243-1	kV	min.	45	50
Insulation resistance after immersion in water	IEC 60167	MΩ	min.	50.000	350.000
Proof tracking index PTI	IEC 60112	PTI			
Comparative tracking index CTI	IEC 60112	CTI	min.	180*	220
Tracking and erosion resistance	IEC 60112	Klasse	min.		

other properties

Thermal endurance	IEC 60216	T.I.		155*	155
Density	ISO 1183	g/cm ³		1,8 - 2,0*	1,880
Water absorption, absolute	ISO 62	mg	max.	23***	10,90

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Brennbarkeitsprüfungen

Flammability	IEC 60695-11-10			V-0	V-0
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Fire behaviour and fire side effects of materials and parts DIN 5510 – 2

flammability group	DIN 5510 T.2	class			S 4
smoke emission class	DIN 5510 T.2	class			SR 2
drop forming category	DIN 5510 T.2	class			ST 2

Fire testing at NF F 16-101

Fire behaviour and materil selection	NF F 16-101	class			F1
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Fire testing at UNI 9174

Flammability of materials	UNI 9174	class	30 s		1 B
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Glowing/hot-wire based test methods

Glow-wire flammability index GWFI	DIN EN 60695-2-12				
Glow-wire ignition temperature GWIT	DIN EN 60695-2-13				

Base material Woven glass cloth
Matrix resin: Epoxy (epoxide)
Compound: halogen free

* Typical values as per IEC 60893-4. They shall not be considered as specification requirements.

** for thickness $\geq 3,0$ mm

*** for test specimens 50 x 50 x 4 mm

Test values are derived from an average type test

RoHS- Declaration

This material does not contain any substances of very high concern as listed in the EU directive 2011/65/EU, article 4, paragraph 1