

PRODUCT DATA SHEET

BAGGES TGE-1

RoHSII :	The material is in compliance with EU directive 2011/65/EU (RoHS II)	Components :	Glass fabric - epoxy
Color :	Light yellow	Nema L1-1 :	G-10
DIN 7735 :	HGW 2375	IEC 61212 :	EP GC 21

Mechanical Properties	TestMethod	Value	Unit	Thickness	Note
Flexural strength	ISO 178	350	MPa	id > 100mm	*1
Compressive strength axial	ISO 604	200	MPa		*1
Cohesion between layers	IEC 61212-2 4.3	400	MPa	id < 100mm	*1
Physical Properties					
Density	IEC 1183-A	1,75	g/cm3	All	*1
Water absorption after (24h 23°C)	IEC 62/1	0,2	mg/cm2	50x50x3 mm	*4
Electrical Properties					
Electric strength in oil at 90°C	IEC 60243-1	11,0	kV/mm perpendicular	B) 3,0 mm	*2
Electric strength in oil at 90°C	IEC 60243-1	60	kV/25mm parallel	B) 3,0 mm	*2
Permittivity 50 Hz	IEC 60250	4,5			*3
Permittivity 1 MHz	IEC 60250	4,5			*3
Dissipation factor 50 Hz	IEC 60250	0,010			*3
Dissipation factor 1 MHz	IEC 60250	0,010			-
Insulation resistance after immersion in water	IEC 60167	1000	M Ω	A)	*4
Thermal Properties					
Thermal endurance index 20.000h (T.I.)	IEC 60216	140	°C	≥ 3,0 mm	-

Characteristics and applications / Notes and Conditioning													
<p>Particularly good electrical and mechanical properties. Extremely high mechanical strength. Retains electrical properties at high air humidity. High resistance to chemicals. Construction and insulation material in large rotating electrical machines and insulation cylinders in dry transformers.</p>													
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #e0e0e0;"> <th style="text-align: left;">Notes</th> <th style="text-align: left;">*Conditioning</th> </tr> </thead> <tbody> <tr> <td>A) ID > 8mm and/or OD > 10mm</td> <td>1: 24h/23°C/50%RH</td> </tr> <tr> <td>B) Wall thickness</td> <td>2: 24h/23°C/50%RH + 1h/Oil 90°C</td> </tr> <tr> <td>C) 230 MPa measured at 150°C</td> <td>3: 96h/105°C + 1h/23°C/20%RH</td> </tr> <tr> <td>D) Wall thickness ≥ 4,0mm</td> <td>4: 24h/50°C + 24h/water 23°C</td> </tr> <tr> <td></td> <td>5: 96h/105°C + 1h/Oil 90°C</td> </tr> </tbody> </table>	Notes	*Conditioning	A) ID > 8mm and/or OD > 10mm	1: 24h/23°C/50%RH	B) Wall thickness	2: 24h/23°C/50%RH + 1h/Oil 90°C	C) 230 MPa measured at 150°C	3: 96h/105°C + 1h/23°C/20%RH	D) Wall thickness ≥ 4,0mm	4: 24h/50°C + 24h/water 23°C		5: 96h/105°C + 1h/Oil 90°C	
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The data mentioned in this data sheet is after our knowledge correct, but we reserve the right to make changes without notice.

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