

# PRODUCT DATA SHEET

## BAGGES SGE-1

**RoHSII :** The material is in compliance with EU directive 2011/65/EU (RoHS II)

**Color :** Light yellow

**DIN 7735 :** Hgw 2372.2

**Components :** Glass fabric epoxy

**Nema L1-1 :** FR 4&5

**EN 60893 :** EP GC 204

Mechanical Properties	TestMethod	Value	Unit	Thickness
Flexural strength at RT	ISO 178	450	MPa	≥ 1,6mm
Flexural strength at elevated temp.	ISO 178	200	MPa	≥ 1,6mm
Modulus of elasticity	ISO 178	22000	MPa	≥ 1,6mm
Compressive strength	ISO 604	550	MPa	≥ 5,0mm
Izod impact strength, parallel	ISO 180/2A	65.0	kJ/m <sup>2</sup>	≥ 5,0mm
Shearing strength, parallel	ISO 60893-2	55.0	MPa	≥ 5,0mm
Tensile strength	ISO 527	320	MPa	≥ 1,6mm
Physical Properties				
Flammability	IEC 60695-11-10	V-0		3,0 mm
Density	IEC 1183-A	1.9	g/cm <sup>3</sup>	All
Water absorption	IEC 62/1	10	mg	50 x 50 x 3mm
Electrical Properties				
Electric strength in oil at 90°C	IEC 60243-1	15.0	kV/mm perpendicular	3,0 mm
Electric strength in oil at 90°C	IEC 60243-1	70	kV/mm perpendicular	≥ 3.0mm
Permittivity 50 Hz	IEC 60250	4.5		≥ 1,6mm
Permittivity 1 MHz	IEC 60250	4.5		≥ 1,6mm
Dissipation factor 50 Hz	IEC 60250	0.005		≥ 1,6mm
Dissipation factor 1 MHz	IEC 60250	0.0008		≥ 1,6mm
Insulation resistance after immersion in water 1MHz	IEC 60167	500000	M Ω	All
Comparative tracking index	IEC 60112	200	CTI	≥ 3,0mm
Thermal Properties				
Thermal endurance index 20.000h (T.I.)	IEC 60216	145	°C	≥ 3,0 mm

Notes and Conditioning

Notes	*Conditioning
A) Thickness > 8mm	1: 24h/23°C/50%RH
B) Thickness ≥ 4,0mm	2: 24h/23°C/50%RH + 1h/Oil 90°C
C) 1 h/130°C / measured at 130°C	3: 96h/105°C + 1h/23°C/20%RH
D) 1 h/150°C / measured at 150°C	4: 24h/50°C + 24h/water 23°C
E) 1 h/180°C / measured at 180°C	5: 96h/105°C + 1h/Oil 90°C
F) 1 h/200°C / measured at 200°C	

The data mentioned in this data sheet is after our knowledge correct, but we reserve the right to make changes without notice.

rev: 09/2021