

# PRODUCT DATA SHEET

## BAGGES SPP-2

**RoHSII :** The material is in compliance with EU directive 2011/65/EU (RoHS II)  
**Color :** Dark brown  
**DIN 7735 :** Hp2061

**Components :** Paper phenolic  
**Nema L1-1 :** XX  
**EN 60893 :** PF CP 203

Mechanical Properties	TestMethod	Value	Unit	Thickness	Note
Flexural strength at RT	ISO 178	170	MPa	≥ 1,6mm	*1
Flexural strength at elevated temp.	ISO 178	-	MPa	≥ 1,6mm	-
Modulus of elasticity	ISO 178	8000	MPa	≥ 1,6mm	*1
Compressive strength	ISO 604	320	MPa	≥ 5,0mm	*1
Izod impact strength, parallel	ISO 180/2A	3,5	kJ/m <sup>2</sup>	≥ 5,0mm	*1
Shearing strength, parallel	ISO 60893-2	35,0	MPa	≥ 5,0mm	*1
Tensile strength	ISO 527	140	MPa	≥ 1,6mm	*1
<b>Physical Properties</b>					
Flammability	IEC 60695-11-10	-		3,0 mm	-
Density	IEC 1183-A	1,35	g/cm <sup>3</sup>	All	*1
Water absorption	IEC 62/1	200	mg	50x50x3 mm	*4
<b>Electrical Properties</b>					
Electric strength in oil at 90°C	IEC 60243-1	5,0	kV/mm perpendicular	3,0 mm	*2
Electric strength in oil at 90°C	IEC 60243-1	20	kV/25mm parallel	≥ 3,0 mm	*2
Permittivity 50 Hz	IEC 60250	5,0		≥ 1,6mm	*3
Permittivity 1 MHz	IEC 60250	-		≥ 1,6mm	-
Dissipation factor 50 Hz	IEC 60250	0,050		≥ 1,6mm	*3
Dissipation factor 1 MHz	IEC 60250	-		≥ 1,6mm	-
Insulation resistance after immersion in water 1MHz	IEC 60167	100	M Ω	All	*4
Comparative tracking index	IEC 60112	100	CTI	≥ 3,0 mm	*1
<b>Thermal Properties</b>					
Thermal endurance index 20.000h (T.I)	IEC 60216	120	°C	≥ 3,0 mm	-

### Characteristics and applications / Notes and Conditioning

Mechanically the best paper phenolic type with electrical properties adequate for insulation in low-voltage constructions. Construction material in electrical appliances, bus-bar carriers, partition plates, protection materials, etc.

**Characteristics and applications / Notes and Conditioning**

<b>Notes</b>	<b>*Conditioning</b>
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