

ISOVAL[®] TM

ISOVAL[®] TM is in accordance to the following international standards:

IEC 60893	EP GC 203
	EP GC 308
NEMA LI 1	G 11

Composition

ISOVAL[®] TM is prepared from glass fabric impregnated with the well known ISOVAL[®] epoxy system. It gives good thermal endurance at elevated temperatures, a very good chemical resistance and a limiting temperature of more than 180°C.

Application

ISOVAL[®] TM is especially used in those areas where good machinability is required. Due to its fine glass fabric ISOVAL[®] TM can also be more easily machined than other materials.

Availability

Thickness: 0,2 - 160 mm Thickness tolerances: according IEC 60893
Standard sheet size: 2140 +30/-0 mm x 1040 +30/-0 mm
2140 +30/-0 mm x 1220 +30/-0 mm
2800 +30/-0 mm x 1220 +30/-0 mm (up to 130 mm thickness)
3180 +30/-0 mm x 1040 +30/-0 mm (up to 60 mm thickness)
3180 +30/-0 mm x 1220 +30/-0 mm (up to 60 mm thickness)
Machined parts and cuttings are available on request.

Colour: slight green

All information given here is based on currently available facts and on the results of experiments performed with all due care in our laboratories. It does not in any way reduce the responsibility of the user for carrying out further tests in order to ensure successful processing and use in specific applications.

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TECHNICAL DATA

Values in the table are mean values of our production. Values according to the standards IEC 60893 are guaranteed.

Properties	Norm	Unit	Value
Density	ISO 1183/A	g/cm ³	approx. 2,0
Flexural strength at 23°C / 120 °C / 150°C	ISO 178	MPa	400 / 280 / 200
Flexural modulus of elasticity	ISO 178	MPa	approx. 18000
Impact strength (Charpy) parallel to laminations	ISO 179/3 C	kJ/m ²	50
- with notch			100
- without notch			
Tensile strength	ISO 527	MPa	220
Compressive strength perpendicular to laminations	ISO 604	MPa	500
Compressive strength parallel to laminations	ISO 604	MPa	150
Insulation resistance after immersion in water	IEC 167	Ohm	5.10 ¹⁰
Electrical strength at 90°C in oil perpendicular to laminations (thickness 3 mm)	IEC 243	KV/mm	13
Breakdown voltage at 90°C in oil parallel to laminations	IEC 243	kV	40
Permittivity at 50 Hz and 1 MHz	IEC 250	-	5.5
Comparative tracking index	IEC 112	-	CTI 180
Thermal endurance	IEC 216	T.I.	180
Water absorption (thickness 10 mm)	ISO 62/1	mg	30

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