

ISOVAL[®] TM

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

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|-----------|----------------------|
| IEC 60893 | EP GC 203, EP GC 308 |
| DIN 7735 | Hgw 2372.4 |
| NEMA LI 1 | G 11 |

Composition

ISOVAL[®] TM is prepared from glasscloth 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-cloth ISOVAL[®] TM can also be more easily machined than other materials.

Availability

Thickness: 0,2 - 130 mm
Tolerances: acc. IEC 60893

Sheet size: thickness 0,2-80 mm: 2140 +30/-0 mm x 1040 +30/-0 mm
 thickness 0,2-130 mm: 1040 +30/-0 mm x 1040 +30/-0 mm
 thickness 0,5-80 mm: 2800 +30/-0 mm x 1220 +30/-0 mm
 Other sizes on request
Colour: slight green

Machined parts and cuttings are available on request.

Technical Data

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

| Properties | Testmethod | 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 | 33 |
| Tensile strength | ISO 527 | MPa | 240 |
| Compressive strength perpendicular to laminations | ISO 604 | MPa | 500 |
| Insulation resistance after immersion in water | IEC 167 | Ohm | 10 ¹² |
| Electrical strength at 90°C in oil perpendicular to laminations | 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 | 20 |