

# WKT 108

## TECHNICAL DATA SHEET

### STANDARDS

acc. to EN 60893:UP GM 203  
acc. to NEMA LI-1:GPO-3

### LAMINATE FOR EXTREME ELECTRICAL REQUIREMENTS.

Low smoke gas emission and toxicity in case of fire.  
Flame-retardant acc. to UL 94, level V0.  
Classification of flammability acc. to EN 45545-2.  
Special creep resistance CTI 600.

### DESCRIPTION

WKT 108 is a special laminated material based on halogen-free, unsaturated polyester resin in connection with a reinforcement glass mat. Primarily the material distinguishes by means of good mechanical as well as excellent electrical characteristics.

### ROHS DIREKTIVE

The dangerous substances mentioned in the EU-directive 2015/863/EU (RoHS-Direktive), §4 Clause 1, are not used for manufacturing the material.

### COLOUR

White

### STANDARD SIZE

2440 x 1220mm (2,0 - 80 mm)  
3720 x 1020mm (2,0 - 60 mm)  
2020 x 1020mm (40 - 130mm)  
We are well prepared to cut the sheets to the required dimension.

### APPLICATION

Railway- and traffic technology  
Electrical industry

| MECHANICAL CHARACTERISTICS |     | VALUE | NORM    |
|----------------------------|-----|-------|---------|
| Tensile strength //        | MPa | 70    | ISO 527 |
| Flexural strength +        | MPa | 130   | ISO 178 |
| Compressive strength +     | MPa | 260   | ISO 604 |
| Elasticity modulus         | MPa | 9000  | ISO 178 |

| THERMAL CHARACTERISTICS    |                                  | VALUE   | NORM      |
|----------------------------|----------------------------------|---------|-----------|
| Heat resistance            | °C                               | 155     | IEC 60216 |
| Thermal class              |                                  | F       | DIN 60085 |
| Thermal conductivity       | W/mk                             | 0,3     |           |
| Linear expansion factor // | 10 <sup>-6</sup> K <sup>-1</sup> | 15 - 30 |           |

| ELECTRICAL CHARACTERISTICS |         | VALUE | NORM        |
|----------------------------|---------|-------|-------------|
| Dielectric strength +      | KV/mm   | 13    | IEC 60243-1 |
| Breakdown voltage //       | KV/25mm | 70    | IEC 60243-1 |
| Tracking resistance        | CTI     | 600   | IEC 60112   |

| OTHER CHARACTERISTICS |                    | VALUE      | NORM       |
|-----------------------|--------------------|------------|------------|
| Density               | gr/cm <sup>3</sup> | 1,9        | ISO 1183 A |
| Flammability          |                    | V0         | UL 94      |
| Fire protection       | R22, R23           | HL3 > 4mm  | EN 45545-2 |
|                       | R22, R23           | HL2 < 4mm  | EN 45545-2 |
| Water absorption      | mg (D=4)           | <30        | ISO 62-1   |
| Halogen-free          |                    | Yes        |            |
| Resin                 |                    | UP         |            |
| Type of reinforcement |                    | Glass mats |            |

All measured values have been determined at room temperature.  
The indicated data describe average values (typical measuring values) , which can be changed in the edge zone of 50mm. The values are not legally binding so that we cannot accept any responsibility for their accuracy.