

# WKT 174

## TECHNICAL DATA SHEET

### STANDARDS

acc. to EN 60893:UP GM 204

### LAMINATE FOR EXTREME ELECTRICAL REQUIREMENTS.

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

### DESCRIPTION

WKT 174 is a special laminated material based on halogen-free, unsaturated polyester resin in connection with a reinforcement of cut glass und glass fibres. 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, Red

### 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  
Transformer industry  
Mechanical engineering

MECHANICAL CHARACTERISTICS		VALUE	NORM
Tensile strength //	MPa	150	ISO 527
Flexural strength +	MPa	250	ISO 178
Compressive strength +	MPa	400	ISO 604
Elasticity modulus	MPa	16000	ISO 178

THERMAL CHARACTERISTICS		VALUE	NORM
Heat resistance	°C	155	IEC 60216
Thermal class		F	DIN 60085
Thermal conductivity	W/mk	0,3	DIN 52612
Linear expansion factor //	10 <sup>-6</sup> K <sup>-1</sup>	15 - 30	DIN 53762

ELECTRICAL CHARACTERISTICS		VALUE	NORM
Dielectric strength +	KV/mm	13	IEC 60243-1
Breakdown voltage //	KV/25mm	65	IEC 60243-1
Tracking resistance	CTI	600	IEC 60112

OTHER CHARACTERISTICS		VALUE	NORM
Density	gr/cm <sup>3</sup>	1,85 - 1,9	ISO 1183 A
Flammability		V0	UL 94
Water absorption	mg (D=4)	<30	ISO 62-1
Halogen-free		Yes	
Resin		UP	
Type of reinforcement		Cut glass / glassfibres	

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.