

## Application purpose and characteristics

Material can be used as a high quality construction material as well as an electric and thermal insulation material, especially in those areas where high operating temperatures are coupled with high mechanical strength requirements.

High temperature resistant epoxy laminates with very good mechanical and thermal properties at high temperatures.

Material name, short description	EP GM
Material name, based on technical standards	Epoxy laminated glass mat
Density	2 g/cm <sup>3</sup>
Color	
Compound code	EP GM 203.021-00

## Mechanical properties

Tensile strength	≥ 250 N/mm <sup>2</sup> ISO 178
Flexural modulus of elasticity	≥ 20000 N/mm <sup>2</sup> ISO 178 perpendicular to laminations
Bending strength 1	≥ 360 N/mm <sup>2</sup> ISO 178 23 °C
Bending strength 2	≥ 200 N/mm <sup>2</sup> ISO 178 150 °C
Bending strength 3	≥ 100 N/mm <sup>2</sup> ISO 178 180 °C
Compressive strength 1	≥ 600 N/mm <sup>2</sup> ISO 604 perpendicular to laminations
Impact strength	≥ #ErrorkJ/m <sup>2</sup> ISO 179 Charpy, parallel to laminations

## Thermal attributes

Thermal conductivity	0.35 W/(m·K) ISO 8302
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## Electrical attributes

Comparative tracking index	180 CTI IEC 60112
Dielectric tension	≥ 60 kV IEC 60243-1 90 °C, in oil parallel to laminations
Dielectric strength 1	≥ 13 kV/mm IEC 60243-1 90 °C, in oil perpendicular to laminations, thickness 3mm
Insulation resistance	≥5x10 <sup>3</sup> MOhm IEC 60167 after immersion in water

## Other attributes

Water absorption	≤ 40 mg ISO 62-1 Thickness 10 mm
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In compliance with **RoHS** and **REACH** directives.

This information is based on our available data. These values are measured on standard test specimens and are within the normal tolerance range of material properties and do not represent guaranteed property values. Therefore they shall not be used for specification purposes. The customer is solely responsible for quality and suitability of material for his application. He has to test usage and processing prior to use. Angst+Pfister makes no guarantees for the suitability of the material for any given application and assumes no obligation or liability in connection with the information provided above.