

OVERVIEW TECHNICAL DATA

## “IYPA” Heat Insulation Plates / High-tech

Country of origin: DE

|                            |   |
|----------------------------|---|
| <b>Product description</b> | Engineered composite material made of resin-bound glass fiber and fillers |
| <b>Standard colour</b>     | white   |
| <b>Main applications</b>   | Pressure resistant insulation material for tool- and mouldindustry        |
| <b>Delivery program</b>    | Sheets, panels and highly precise machined parts and finished components  |

### Physical characteristics

| Properties       | Test Standard | Unit              | Typical value |
|------------------|---------------|-------------------|---------------|
| Specific density | ISO 1183      | g/cm <sup>3</sup> | 1,8           |
| Water absorption | ISO 62        | %                 | 0,3           |

### Thermal characteristics

| Properties                         | Test Standard | Unit                               | Typical value |
|------------------------------------|---------------|------------------------------------|---------------|
| Operating temperature, continuous  | -             | °C                                 | 200           |
| Operation temperature, short-term  | -             | °C                                 | 210           |
| Coeff. of linear thermal expansion | DIN 51045     | 10 <sup>-6</sup> x K <sup>-1</sup> | 18            |
| Thermal conductivity               | -             | W/mK                               | 0,18          |

### Mechanical characteristics

| Properties                     | Test Standard | Unit              | Typical value |
|--------------------------------|---------------|-------------------|---------------|
| Compressive strength at 23 °C  | ISO 604       | N/mm <sup>2</sup> | 330           |
| Compressive strength at 200 °C | ISO 604       | N/mm <sup>2</sup> | 120           |
| Flexural strength at 23 °C     | ISO 178       | N/mm <sup>2</sup> | 140           |

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The standard values shown in this data sheet are measured by standard test methodes. Depending on operation terms and dimensions the material properties can differ from these values.

Please contact our applications and sales engineers to clarify the suitability of the material for your application.