

## Technical Data Sheet

07/16  
replaces edition 01/14

# GL<sup>®</sup> M

*...Hightech - Insulation material  
for extreme loads*

### Product Specification

The grade GL<sup>®</sup> M is based on inorganic materials and a high temperature polymer.  
GL<sup>®</sup> M is not flammable.

### Special Material Characteristics

- **very high continuous usage temperature**
- **very high compressive strength**
- **excellent insulation effect**

### Range of Application

The grade GL<sup>®</sup> M offers a higher usage temperature than other glass fibre reinforced thermosetting materials. Compared to fibre cement materials GL<sup>®</sup> M can be used for applications with higher mechanical loads.

The parts made of GL<sup>®</sup> M must be firmly clamped and the whole surface must be loaded.

### Typical Applications:

- in thermal high stressed presses and punch units
- in the glass making industry
- in welding plants
- for extrusion dies

Please note that the nominal thickness of this material may show dimensional deviations up to 7%.

### Delivery Information:

Standard thickness: 2 - 80 mm

### Technical data\*:

|                                     |                      |                   |
|-------------------------------------|----------------------|-------------------|
| Max. service temperature            |                      |                   |
| • long-term                         | 400                  | °C                |
| • short-term                        | 600                  | °C                |
| Compressive strength (EN ISO 604)   |                      |                   |
| • at ambient temperature            | 400                  | N/mm <sup>2</sup> |
| • at 200 °C                         | 250                  | N/mm <sup>2</sup> |
| Coefficient of thermal conductivity |                      |                   |
| • at ambient temperature            | 0.30                 | W/mK              |
| • at 200 °C                         | 0.35                 | W/mK              |
| (DIN 52 612)                        |                      |                   |
| Linear coefficient (DIN 53 752)     |                      |                   |
| X- and Y-direction                  | 10·10 <sup>-6</sup>  | 1/K               |
| Z-direction                         | 170·10 <sup>-6</sup> |                   |
| Flexural strength (EN 63)           |                      |                   |
| • at ambient temperature            | 200                  | N/mm <sup>2</sup> |
| • at 200 °C                         | 50                   | N/mm <sup>2</sup> |
| Density                             | 2.1                  | g/cm <sup>3</sup> |

\*) Further technical details and machining recommendations upon request



Specifications are subject to alteration due to technical development. The standard values given in this data sheet are not part of any contract.