

# DOTEC® 350

| Product description | Engineered composite material made of temperature resistant binder and fillers with low thermal conductivity      |
|---------------------|---|
| Standard colour     | green   |
| Main applications   | Thermal and electrical insulation parts for machine engineering and process industry - compression molded parts - |
| Delivery program    | Sheets, panels and highly precise machined parts and finished components  |

# **Physical characteristics**

| Properties       | Test Standard | Unit  | Typical value |
|------------------|---------------|-------|---------------|
| Specific density | ISO 1183      | g/cm³ | 0,9           |
| Water absorption | ISO 62        | %     | 0,8           |

#### Thermal characteristics

| Properties                         | Test Standard | Unit                               | Typical value |
|------------------------------------|---------------|------------------------------------|---------------|
| Operating temperature, continuous  | _             | °C                                 | 350           |
| Operation temperature, short-term  | _             | °C                                 | 400           |
| Coeff. of linear thermal expansion | DIN 51045     | 10 <sup>-6</sup> x K <sup>-1</sup> | 40            |
| Thermal conductivity at 200 °C     | DIN 52612     | W/mK                               | 0,12          |

## **Mechanical characteristics**

| Properties                                    | Test Standard | Unit              | Typical value |
|---|---------------|-------------------|---------------|
| Compressive strength at 23 °C                 | ISO 604       | N/mm <sup>2</sup> | 38            |
| Modulus of elasticity (compression) at 23 °C  | ISO 604       | N/mm <sup>2</sup> | 1150          |
| Compressive strength at 250 °C                | ISO 604       | N/mm <sup>2</sup> | 25            |
| Modulus of elasticity (compression) at 200 °C | ISO 604       | N/mm <sup>2</sup> | 890           |
| Flexural strength at 23 °C                    | ISO 178       | N/mm <sup>2</sup> | 20            |
| Modul of elasticity                           | ISO 178       | N/mm <sup>2</sup> | 4500          |

## **Electrical characteristics**

| Properties             | Test Standard | Unit     | Typical value |
|------------------------|---------------|----------|---------------|
| Electric strength (4)  | IEC 243-1     | KV/3 mm  | 20            |
| Electric strength (II) | IEC 243-1     | KV/25 mm | 30            |

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We reserve the right to make changes in the context of further technical developments. The guide values listed in this data sheet are not contractual data.

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