MICALIT® F contains a high percentage of phlogopite mica flakes, impregnated with a silicone binder. It has excellent thermal and good chemical properties, making it suitable for high temperature applications in the automotive and steel industry for exhaust systems, gas turbines, oil and gas burners, furnaces and ovens. It also offers good dielectric and low thermal conductivity properties.

**Properties**

<table>
<thead>
<tr>
<th>Superior</th>
<th>Thermal Resistance</th>
<th>Chemical Resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very Good</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Technical Data**

Typical values for a thickness of 2 mm

- **Mica content**: % >90
- **Binder content**: % <10
- **Density** (DIN 28090-2): g/cm³ 1.90
- **Compressibility** (ASTM F36J): % 15-35
- **Recovery** (ASTM F36J): % 30-45
- **Weight loss (at 800 °C)** (DIN 52911): % <5
- **Tensile Strength** (DIN 52913): MPa >20
- **Dielectric Strength** (ASTM D149): kV/mm >15
- **Thermal Conductivity**
  - at 20 °C perpendicular: W/(m·K) 0.3
  - at 20 °C horizontal: W/(m·K) 3.0
- **Compression modulus** (DIN 28090-2)
  - at room temperature: εKSW % 14.4
  - at elevated temperature: εWSW/200 °C % 6.4
- **Max. operating temperature**: °C 950
- **Max. operating pressure**: Bar 5

**Chemical Resistance Chart**

The recommendations made here are intended as a guideline for the selection of a suitable gasket type. As the function and durability of products are dependent upon a number of factors, the data may not be used to support any warranty claims. If there are specific type-approval regulations, these have to be complied with.

- **+** Recommended
- **o** Recommendation depends on operating conditions
- **-** Not recommended

- **Air (gas)**
- **Argon (gas)**
- **Asphalt**
- **Bio-diesel**
- **Borax**
- **Calcium chloride**
- **Carbon dioxide (gas)**
- **Carbon monoxide (gas)**
- **Flue gas (Exhaust/Coke oven)**
- **Fuel oil**
- **Hydraulic oil (Mineral type)**
- **Hydraulic oil (Phosphate ester-based)**
- **Mineral oil (ASTM no. 1)**
- **Motor oil**
- **Naphtha**
- **Nitrogen (gas)**
- **Nitrous gases (NOx)**
- **Oxygen (gas)**
- **Paraffin oil**
- **Petroleum (Crude oil)**
- **Phosphate ester-base**
- **Plasticizer**
- **Potassium chloride**
- **Potassium nitrate**
- **Steam**
- **Sodium silicate (Water glass)**
- **Sulfur dioxide (gas)**
- **Tar**
- **Transformer oil (Mineral type)**
- **Transformer oil (Phosphate ester-based)**

**Sheet dimensions**

- Size (mm): 1000 x 1200
- Thickness (mm): 0.4 - 3.0

**Other dimensions and thicknesses available on request**

**Disclaimer**

For disclaimer please visit http://donit.eu/disclaimer

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