KLINGERSil C-4500

Top quality Klingersil grade based on carbon fibre with a nitrile rubber binder. A premium quality sealing material with outstanding resistance to alkaline media and steam.

The Klinger group has been recognised as the market leader in gaskets and sealing for over a century. Our research and development laboratories have investigated over 250 different fibre forms in the search for asbestos free alternatives. The search has resulted in a range of high quality and high performance asbestos free materials that have been proven in service.

General Properties
- Good resistance to steam
- Good resistance to alkaline applications
- Excellent load bearing characteristics
- Good creep resistance
- Good resistance to oils, fuels, hydrocarbons
- 3xA anti-stick finish on both sides

Tests and Certifications
- BS 7531 Grade X
- Firesafe API 6 FA, HTB
- DIN-DGVW 92.02 e 052
- BAM U W28 for use with oxygen 100 bar / 85°С
- KTW C54a/94/Stf

Availability
- Sheeting (m): 2.0 x 1.5*, 4.0 x 1.5, 1.5 x 1.0
- Thickness (mm): 0.4, 0.5, 0.75, 1.0, 1.5, 2.0, 3.0

* - Denotes standard sheet size

Also available with re-inforcements:
KLINGERSil C-4509, expanded mild steel
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**KLINGERSIL C-4500**

**Application Guidelines**

1. Usually satisfactory without reference.
2. Usually satisfactory, but suggest you refer to Klinger for advice.
3. Caution: May be suitable but essential that you refer to Klinger for advice.

Chemical compatibility must be considered in all cases.

**Typical Specifications**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressibility ASTM F 36 A</td>
<td>12%</td>
</tr>
<tr>
<td>Recovery ASTM F 36 A</td>
<td>60%</td>
</tr>
<tr>
<td>Stress relaxation DIN 52913</td>
<td>50MPa, 16h/300°C</td>
</tr>
<tr>
<td>Stress relaxation BS 7531</td>
<td></td>
</tr>
<tr>
<td>Klinger cold/hot compression 50MPa</td>
<td>Thickness decrease 23°C</td>
</tr>
<tr>
<td>Gas leakage according to DIN 3535/6</td>
<td>decrease at 300°C</td>
</tr>
<tr>
<td>Chlorides (soluble)</td>
<td></td>
</tr>
<tr>
<td>Thickness increase after fluid</td>
<td>Oil nr.3:5h/150°C</td>
</tr>
<tr>
<td>Immersion ASTM F 146</td>
<td>Fuel B:5h/23°C</td>
</tr>
<tr>
<td>Density</td>
<td></td>
</tr>
<tr>
<td>Average surface resistance</td>
<td>( R_{OA} ) (x1E4)</td>
</tr>
<tr>
<td>Average specific volume resistance</td>
<td>( \rho_{D} ) (x1E4)</td>
</tr>
<tr>
<td>Average power factor</td>
<td></td>
</tr>
<tr>
<td>Average dielectric strength</td>
<td>1kHz, ca. 3mm thick</td>
</tr>
<tr>
<td>Average dielectric constant</td>
<td>1kHz, ca. 3mm thick</td>
</tr>
<tr>
<td>Heat conductivity</td>
<td></td>
</tr>
</tbody>
</table>

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