DESCRIPTION
Insulfrax Rigiform & Flexiform shapes are manufactured from Insulfrax alkaline earth silicate wool, blended with specially selected organic and/or inorganic binders to give rigid or flexible insulating shapes with exceptional characteristics. The vacuum forming manufacturing method permits considerable freedom to vary shape, thickness and density. Insulfrax Rigiform & Flexiform shapes often provide the most economical answer to producing large quantities of parts in simple or complex configurations for a wide range of high temperature applications.

GENERAL CHARACTERISTICS
Insulfrax Rigiform & Flexiform shapes have the following outstanding characteristics:
- High temperature stability
- Low thermal conductivity
- Resistance to thermal shock
- Lightweight
- Complex shape capability

TYPICAL APPLICATIONS
- Cooker element supports
- Automotive heat shields and silencer insulation
- Expansion joints
- Pipe insulation

Any new and/or special use of these products, whether or not in an application listed in our literature, must be submitted to our technical department for their prior written approval.
INSULFRAX RIGIFORM AND FLEXIFORM

Insulfrax Rigiform shapes contain a small percentage of organic binder in addition to inorganic hardening agents. Therefore the products display uniform hardness and density as well as exceptional handling strength. Rigiform shapes can be finished using our in-house machining facilities. Further treatment is possible to increase hardness and remove organics prior to use. Pre-firing can be carried out at either 800°C or 1200°C.

Insulfrax Flexiform shapes are highly flexible products containing selected organic binders. This high degree of flexibility gives excellent compressive recovery characteristics and ease of installation in applications where a rigid shape would prove unsuitable.

TYPICAL PRODUCT PARAMETERS

<table>
<thead>
<tr>
<th></th>
<th>Insulfrax</th>
<th>Rigiform</th>
<th>Flexiform</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typical Chemical Analysis (fibre wt.%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SiO₂</td>
<td>61.0 - 67.0</td>
<td>61.0 - 67.0</td>
<td></td>
</tr>
<tr>
<td>CaO</td>
<td>27.0 - 33.0</td>
<td>27.0 - 33.0</td>
<td></td>
</tr>
<tr>
<td>MgO</td>
<td>2.5 - 6.5</td>
<td>2.5 - 6.5</td>
<td></td>
</tr>
<tr>
<td>Al₂O₃</td>
<td>&lt;1.0</td>
<td>&lt;1.0</td>
<td></td>
</tr>
<tr>
<td>Fe₂O₃</td>
<td>&lt;0.6</td>
<td>&lt;0.6</td>
<td></td>
</tr>
</tbody>
</table>

Physical Properties

<table>
<thead>
<tr>
<th></th>
<th>Colour</th>
<th>Classification Temperature (°C) *</th>
<th>Density (kg/m³) *</th>
<th>Loss on ignition (wt.%)</th>
<th>Thermal Conductivity (W/mK)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>White</td>
<td>1200</td>
<td>200 - 400</td>
<td>&lt;10.0</td>
<td>0.07 - 0.15</td>
</tr>
</tbody>
</table>

Mean Temp.

- 400 °C: 0.07 - 0.06
- 600 °C: 0.10 - 0.09
- 800 °C: 0.15 - 0.14

- *Classification Temperature is not a definition of the operational limit of these products, especially when long term physical or dimensional stability is a factor. For certain applications operational temperature limits may be significantly reduced. For assistance or clarification please contact your nearest Unifrax Engineering office.

- *Density is indicative and relates to product characteristics before any secondary treatment. Actual density is dependent on piece size and geometry.

AVAILABILITY

Insulfrax Rigiform & Flexiform shapes are engineered to specific customer requirements and are therefore made to order. Please contact your local Unifrax sales office to discuss your particular requirements. Rigiform shapes are typically available in thicknesses ranging from 5mm to 200mm depending on the size and profile of the piece. Flexiform shapes are typically available in thicknesses ranging from 5mm to 100mm again depending on the size and profile of the piece.

Packaging is either in cardboard cartons or shrink wrapped on pallets.

HANDLING INFORMATION

A Material Safety Data Sheet has been issued describing the health, safety and environmental properties of this product, identifying the potential hazards and giving advice on handling precautions and emergency procedures. This must be consulted and fully understood before handling, storage or use.

Where appropriate Physical Properties data measured according to EN 1094-1.