1. Material/Preparation and Company Name

1.1 Description of the product:
Trade name: KLINGERSIL® C-4430

1.2 Application of the product:
Gasket material for application in bolted flanged joints

1.3 Information on the manufacturer:
Thermoseal Inc.
2350 Campbell Rd.
Sidney, OH 45365
Contact: Quality Manager – Paul Francis
Telephone: 937.498.2222
Fax: 937.498.4911
Emergency Phone: 937.658.1288

2. Hazard Identification

Identification of danger: In its form as supplied no hazards known.

3. Composition/Information on Components

3.1 Chemical Characteristics

<table>
<thead>
<tr>
<th>Material contents Ingredient</th>
<th>CAS#</th>
<th>Percent by weight</th>
<th>OSHA PEL (mg/m³)</th>
<th>ACGIH TLV (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcined Kaolin</td>
<td>92704-41-1</td>
<td>45-50</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Fibrous Glass</td>
<td>65997-17-3</td>
<td>25-30</td>
<td>15</td>
<td>NA</td>
</tr>
<tr>
<td>Silicon dioxide</td>
<td>112926-00-8</td>
<td>5</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Aramid-fibres</td>
<td>26125-61-1</td>
<td>5</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Magnesium Oxide</td>
<td>1309-48-4</td>
<td>&lt;0.5</td>
<td>15</td>
<td>10</td>
</tr>
</tbody>
</table>

Danger classification not necessary as no dangers are known based on the level of knowledge at the present time.

4. First Aid Actions

After inhaling: Not applicable (accordingly see point 6)

After skin contact: Not applicable (accordingly see point 6)

After eye contact: Remove small solid particles and rinse with water approx. 10 min. If provoking continues, a doctor must be consulted.

After swallowing: No measures necessarily.

Note for the doctor: Not applicable.
5. Measures for Firefighting

**Suitable extinguishing agent:** Water, carbon dioxide, powder extinguishers, foam extinguishers.

**Extinguishing agents which is unsuitable for safety reasons:** Not known.

**Special dangers through the material or the preparation itself, its combustion products or resulting gases:** In the case of combustion, the same gases are produced as with burning rubber. Heavy carbon black formation.

**The following can be produced in case of fire:** Carbon monoxide, carbon dioxide, sulphur oxides and nitrous gases (NOx), irritating/caustic, combustible as well as poisonous carbonisation gases.

**Special protective equipment:** When Firefighting, breathing apparatus and eye protection have to be worn against dust and fumes and burning rubber.

**Additional note:** There is the danger of the rubber re-igniting. For this reason, additional cooling after extinguishing is necessary.

6. Measures in Case of Unintentional Release

**Precautionary measures related to persons:** Avoid dust formation

**Environmental protection measures:** No dangers known.

**Procedure for cleaning:** Use of approved vacuum cleaners with fine dust filters.

6.1 Measures in Case of Unintentional exceeding Dust Release

**General Note:** In case of improper use and use which is not in compliance with stipulations e.g. grinding might cause an exceeding amount of fine dust. In this case apply protective respiratory equipment meeting MSHA/NIOSH standards.

**After Inhaling:** Bring to fresh air.

**After skin contact:** Washing with soap

7. Handling and Storage

7.1 Handling

**Notes on safe handling:** Measures for the avoidance of strong dust formation.

**Notes on protection against fire and explosion:** Material is flammable only through effects of an external flame.

7.2 Storage

**Requirements on storage rooms and containers:** Dry storage rooms. Material should not be stored in the vicinity of the heating as it can become brittle and no longer usable in accordance with stipulations.

**Notes on storing together with other products:** No restrictions or dangers known.
8. Limits of Exposure and Personal Protective Equipment

8.1 Exposure References
See point 7; no further measures necessarily

8.2 Personal Protective Equipment for processing
Breathing protection: in case of high fine dust concentrations use personal protective equipment (e.g. fine dust respirator acc. MSHA/NIOSH standards ).
Hand protection: Gloves
Body protection: Overall

9. Physical and Chemical Characteristics

9.1. Appearance
Form: firm sheets  Color: Surface: green
Odor: gummy  Cut edge: green

9.2 Safety-related data

<table>
<thead>
<tr>
<th>Value/Range</th>
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</thead>
<tbody>
<tr>
<td>Change in state</td>
</tr>
<tr>
<td>Boiling point/Boiling range:</td>
</tr>
<tr>
<td>Melting point/Melting range:</td>
</tr>
<tr>
<td>Decomposition of elastomer:</td>
</tr>
<tr>
<td>Flash point:</td>
</tr>
<tr>
<td>pH-Wert:</td>
</tr>
<tr>
<td>Ignitability of solid material:</td>
</tr>
<tr>
<td>Ignition temperature</td>
</tr>
<tr>
<td>Self-igniting solid material:</td>
</tr>
<tr>
<td>Fire-promoting properties:</td>
</tr>
<tr>
<td>Danger of explosion</td>
</tr>
<tr>
<td>Explosion limits:</td>
</tr>
<tr>
<td>Vapour pressure:</td>
</tr>
<tr>
<td>Density:</td>
</tr>
<tr>
<td>Solubility in water/grease:</td>
</tr>
</tbody>
</table>

10. Stability and Reactivity

Conditions to be avoided: temperatures >450°C

Materials to be avoided: Not known

Dangerous decomposition products: hydrogen cyanide

The following can result in case of fire: Carbon monoxide, carbon dioxide, sulphur oxides and nitrous gases (NOx), irritating/caustic, combustible as well as poisonous carbonisation gases.

The product is stable under standard conditions.
**11. Information on Toxicology**

In the case of intended use no toxicological effects are known.

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**12. Information on Ecology**

**12.1 Information on elimination (Persistency and degradability)**

Degree of elimination: not known
Persistency: As composite material biologically not degradable (self-classification)

**12.2 Mobility and (bio) accumulation potential:**
water insoluble, fat insoluble, no in vivo resorption, bonding or accumulation known

**12.3 Ecotoxicological Effects**
Not known

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**13. Notes on Disposal**

**13.1 Product**
Recommendation: combustion by a certified recycling company.
Product contains ≥ 3% organic carbon.

**13.2 Contaminated Packaging**
Recommendation: Disposal in accordance with the national regulations.

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**14. Information on Transport**

**14.1 Transport/Further Information**
No dangers known.

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**15. Regulations**

Regulations for dangerous material not applicable.

The product covered by this safety information is classified as an article according to regulation (EG) Nr. 1907/2006 (REACH). In compliance with REACH regulation it is not mandatory to issue material safety data sheets for articles.

Duty to communicate information according to regulation (EG) Nr.1907/2006 (REACH):
The article covered by the present safety data sheet does not contain any substance of very high concern by the candidate list to be included in Annex XIV of REACH exceeding the limit of 0,1% (w/w).

16. Other Information

The data rely on the present conditions of the knowledge and experiences and serve to describe the product regarding safety precautions which can be met. They do not represent a warranty of the product described by characteristics.

Contact person
Mr. Paul Francis Quality and Technical Manager

Revision state: 01

<table>
<thead>
<tr>
<th>Revision/Modification</th>
<th>Point / Sheet</th>
<th>Date</th>
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