MATERIAL SAFETY DATA SHEET

PRF 9333 FF

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

<table>
<thead>
<tr>
<th>Product name</th>
<th>PRF 9333 FF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Subcategory</td>
<td>Friction materials for automobile.</td>
</tr>
</tbody>
</table>

1.3. Details of the supplier of the safety data sheet

<table>
<thead>
<tr>
<th>Company</th>
<th>Roulunds Braking Denmark ApS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>Hestehaven 55 - DK-5260</td>
</tr>
<tr>
<td></td>
<td>Odense S</td>
</tr>
<tr>
<td></td>
<td>Denmark</td>
</tr>
<tr>
<td>Web</td>
<td><a href="http://www.roulunds-braking.dk">www.roulunds-braking.dk</a></td>
</tr>
<tr>
<td>Telephone</td>
<td>00 45 63 134 700</td>
</tr>
<tr>
<td>Fax</td>
<td>00 45 63 134 701</td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:info@roulunds-braking.dk">info@roulunds-braking.dk</a></td>
</tr>
<tr>
<td>Email address of the</td>
<td></td>
</tr>
<tr>
<td>competent person</td>
<td><a href="mailto:sds@roulunds-braking.dk">sds@roulunds-braking.dk</a></td>
</tr>
</tbody>
</table>

Emergency telephone number

00 45 63 134 700

SECTION 2: Hazards identification

Properties

<table>
<thead>
<tr>
<th>Color</th>
<th>➔ Black/Grey</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>➔ Solid</td>
</tr>
</tbody>
</table>

Main hazards

No Significant Hazard

SECTION 3: Composition/information on ingredients

Hazardous ingredients

67/548/EEC / 1999/45/EC

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Conc. (%w/w)</th>
<th>CAS No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnesium Oxide (MgO) (Magnesium oxide)</td>
<td>1 - 10%</td>
<td>1309-48-4</td>
</tr>
<tr>
<td>Barium Sulphate</td>
<td>1 - 10%</td>
<td>7727-43-7</td>
</tr>
<tr>
<td>Calcium hydroxide (Calcium hydroxide)</td>
<td>1 - 10%</td>
<td>1305-62-0</td>
</tr>
<tr>
<td>boric acid (Borate compounds, Inorganic)</td>
<td>0 - 0.5%</td>
<td>10043-35-3</td>
</tr>
</tbody>
</table>

Description

Contains no free substances that are considered to be hazardous. However, when being worked with mechanically it is possible that a fine dust is formed. Do not breathe dust.
SECTION 4: First aid measures

Description of first aid measures

Inhalation: Do not breathe dust. Move the exposed person to fresh air.

Eye contact: Dust. Rinse immediately with plenty of water for 15 minutes holding the eyelids open.

Skin contact: Wash off immediately with plenty of soap and water.

Ingestion: Dust. Rinse mouth thoroughly. Drink 1 to 2 glasses of water.

Most important symptoms and effects, both acute and delayed

Skin contact: May cause irritation to skin.

SECTION 5: Firefighting measures


Special hazards arising from the substance or mixture

Further information. SECTION 10: Stability and reactivity.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Further information. SECTION 8: Exposure controls/personal protection.

Methods and material for containment and cleaning up: Not applicable.

Reference to other sections: See section 13 for information on waste disposal.

SECTION 7: Handling and storage

Precautions for safe handling

Use: Avoid raising dust. Clean the area using a vacuum cleaner. Keep away from acids, Bases.

If mechanically processed provide local dust extraction. Do not use brushes, compressed air or other hazardous agents to clean the brake or brake pads.

Conditions for safe storage, including any incompatibilities

Suitable packaging: Keep container tightly closed and dry.

Store in original container.

SECTION 8: Exposure controls/personal protection

Control parameters

Exposure Limit Values
Exposure Limit Values

<table>
<thead>
<tr>
<th>Material</th>
<th>ACGIH TLV TWA</th>
<th>ACGIH TLV STEL</th>
<th>Notations</th>
<th>OSHA PEL 8hr TWA ppm</th>
<th>OSHA PEL 8hr TWA mg m³</th>
<th>Skin Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barium Sulphate</td>
<td>10 mg/m³</td>
<td>-</td>
<td>-</td>
<td>15</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Baric acid (Borate compounds, inorganic)</td>
<td>2 mg/m³</td>
<td>6 mg/m³</td>
<td>A4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Calcium dihydroxide (Calcium hydroxide)</td>
<td>5 mg/m³</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Magnesium Oxide (MgO) (Magnesium oxide)</td>
<td>10 mg/m³ (I)</td>
<td>-</td>
<td>A4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Exposure controls

- **Appropriate engineering controls**: Ensure adequate ventilation of the working area.
- **Eye / face protection**: Dust. Eye protection.
- **Skin protection - Hand protection**: Wear suitable gloves. Hand protection. dustproof.
- **Skin protection - Other**: Wear suitable protective clothing.
- **Respiratory protection**: Do not breathe dust. Use as appropriate: P2 mask.

**SECTION 9: Physical and chemical properties**

Information on basic physical and chemical properties

- **State**: Solid
- **Color**: Black/Grey

**SECTION 10: Stability and reactivity**

- **Chemical stability**: Stable under normal conditions.
- **Incompatible materials**: Avoid contact with: Acids, Bases.
- **Hazardous decomposition products**: Burning produces irritating, toxic and obnoxious fumes.

**SECTION 11: Toxicological information**

Information on toxicological effects

- **Acute toxicity**: No Significant Hazard.
- **Skin corrosion/irritation**: May cause irritation to skin.
- **11.1.4. Toxicological information**: Not determined

**SECTION 12: Ecological information**

- **Toxicity**: Not determined

**SECTION 13: Disposal considerations**
Disposal methods

Local and national regulations.

SECTION 14: Transport information

DOT

The product is not classified as dangerous for carriage.

IMDG

The product is not classified as dangerous for carriage.

IATA

The product is not classified as dangerous for carriage.

SECTION 15: Regulatory information

Inventories

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>TSCA</th>
<th>MA</th>
<th>SARA313</th>
<th>CALPROP65</th>
<th>CWA307</th>
<th>CWA311</th>
<th>CAA112</th>
<th>SARA302</th>
<th>SARA304</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnesium Oxide (MgO) (Magnesium oxide (MgO))</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Barium Sulphate (Sulfuric acid, barium salt (1:1))</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Calciumhydroxid (Calcium hydroxide (Ca(OH)2))</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Boric acid (Boric acid (H3BO3))</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>

SECTION 16: Other information

Other information

General Guidelines for Brake Service. When changing the brake linings, the content of the friction materials on the vehicle may be unknown, so it is recommended to follow the guidelines given in “Work Practices and Engineering Controls for Brake and Clutch Inspection, Disassembly, Repair and Assembly – Mandatory” (29 CFR 1910.1001, Appendix F).

Further information

The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process.