1. **IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING:**

   **Product Name:** DB777  
   **Manufacturer/Importer:** Roulunds Braking ApS  
   **Address:** Hestehaven 55 5260 Odense S  
   **Phone No.:** 63 13 47 00  
   **Fax no.:** 63 13 47 01  
   **E-mail:** ghl@roulunds-braking.dk

2. **HAZARDS IDENTIFICATION:**

   **Main Toxicological and Ecological hazards:**  
   When correctly handled no hazards for people and environment are know so far.  
   When mechanically treated however (grinding, drilling for example), ingredients with hazardous properties (see table point 3) could be released.

3. **COMPOSITION/INFORMATION ON INGREDIENTS:**

   The friction material contains different inorganic and organic compounds, which are bonded in a system of cured binding agents and fibres.

   This material does not contain any substances on the REACH candidate list (SVHC) dated 15th Dec 2010.

   This material does not contain any ingredients on the Global Automotive Declarable Substances List (www.gadsl.org)

   **Contains:**

<table>
<thead>
<tr>
<th>CAS number</th>
<th>EC-no.:</th>
<th>%:</th>
<th>Chemical Name</th>
<th>Classification</th>
<th>Notification</th>
</tr>
</thead>
<tbody>
<tr>
<td>96-00-0</td>
<td>202-626-1</td>
<td>&lt; 1%</td>
<td>furfuryl alcohol</td>
<td>Xn</td>
<td>R20/21/22</td>
</tr>
<tr>
<td>108-95-2</td>
<td>203-632-7</td>
<td>&lt; 0,5%</td>
<td>phenol</td>
<td>T, Xn, C, Mut3</td>
<td>R34, R68, R23/24/25, R48/20/21/22</td>
</tr>
<tr>
<td>287922-11-6</td>
<td></td>
<td></td>
<td>Synthetic vitreous fibre</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25014-41-9</td>
<td></td>
<td></td>
<td>Synthetic organic fibre</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. **FIRST AID MEASURES:**

   **General information:**
   No direct problems with the product. Extensive personal handling can give rise to abrasion or irritation effects.

   **Contact with skin:**
   In case of dust on skin wash with soap and water.

5. **FIRE-FIGHTING MEASURES:**

   **Suitable extinguishing media:**
   Choose extinguishing substances suitable to the surroundings.

   **General information:**
   Non-flammable material.

6. **ACCIDENTAL RELEASE MEASURES:**

   **Personal precautions:**
   See paragraph 8

   **Methods for cleaning up:**
   See paragraph 13

   **General information:**
   No special requirements.

7. **HANDLING AND STORAGE:**

   **Handling:**
Any dust generated should be removed using a vacuum cleaner. Avoid creating dust.

**Storage:**
Store material in a dry and well-ventilated place. Avoid storing next to corrosive substances.

8. **EXPOSURE CONTROLS/PERSONAL PROTECTION:**

**Respiratory Protection:**
Respiratory mask with filter P2 must be used when dust formation occurs.

**Hand Protection:**
Suitable gloves recommended. Suitable types of gloves include cloth, leather or fabric gloves with nitrile palm.

**Body Protection:**
Use clothes to protect from dust.

**General information:**
Smoking and the consumption of food and drink are not permitted in work rooms. Observe general threshold limits for dust.

**Occupational Exposure Limits:**
The limits are according to the German/European legislation which may be different from other countries.

<table>
<thead>
<tr>
<th>CAS number</th>
<th>Chemical Name</th>
<th>Occupational Exposure Limits</th>
<th>Notification</th>
</tr>
</thead>
<tbody>
<tr>
<td>98-00-0</td>
<td>furfury alcohol</td>
<td>5 ppm 20 mg/m³</td>
<td>H</td>
</tr>
<tr>
<td>108-95-2</td>
<td>phenol</td>
<td>1 ppm 4 mg/m³</td>
<td>H</td>
</tr>
</tbody>
</table>

9. **PHYSICAL AND CHEMICAL PROPERTIES:**

- **Form:** Solid
- **Miscible with water:** No
- **pH-value (diluted):** 9-11

10. **STABILITY AND REACTIVITY:**

**Substances to avoid:**
Avoid contact with oxidising or corrosive substances.

**Hazardous Decomposition Products:**
Above 300°C - can give rise to carbon monoxide, hydrogen, ammonia, phenolic and aromatic/alphatic hydrocarbons.

11. **TOXICOLOGICAL INFORMATION:**

**General information:**
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

The finished product:
- Acute toxicity - No acute effect.
- Subacute toxicity - Not yet investigated.
- Experience with humans - None determined.

**phenol**

- LD50 Oral Rat = 317 mg/kg
- LD50 Dermal Rabbit = 850 mg/kg

12. **ECOLOGICAL INFORMATION:**

**Ecotoxicity:**

- **phenol**
  - Toxicity(fish): Fishes: LC50 (48 h) 1.23 μmol/L
  - Toxicity(Water fleas): Water fleas: EC50 (24 h) 3.08 μmol/L

**Degradability:**
Not yet investigated.

**Accumulation:**
Not yet determined.
13. **DISPOSAL CONSIDERATIONS:**

   **General information:**
   Used packaging can be recycled.

   **Disposal considerations:**
   Waste material should be disposed under controlled conditions with the approval of the local authority.

14. **TRANSPORT INFORMATION:**

   The product is not comprised by transport regulations of dangerous goods.

15. **REGULATORY INFORMATION:**

   **General information:**
   No regulations applicable to the finished product.

   **Labelling:**
   The product does not require a hazard warning label in accordance with EC Directives.

16. **OTHER INFORMATION:**

   **R phrases:**
   R34 Causes burns.
   R68 Possible risk of irreversible effects.
   R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
   R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
   R48/20/21/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.

   **General information:**
   The information above represents the today status of the investigation and experience and describe the friction material in view of its safety requirements.
   Any liability for product features is expressly excluded.

   **Final remarks:**
   Material Safety Sheet in accordance with 1907/2006/EC

   **Corrections:**
   Drawn up by: gh
   Updated by: gh