SAFETY DATA SHEET
BARITE

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

PRODUCT NAME
BARITE

APPLICATION
Weighting agent.

SUPPLIER
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Footdee,
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EMERGENCY TELEPHONE
Europe only: +44(0)208 762 8322

2 COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Name</th>
<th>EC No.</th>
<th>CAS-No.</th>
<th>Content</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>BARIUM SULPHATE</td>
<td>231-784-4</td>
<td>7727-43-7</td>
<td>60-100%</td>
<td>-</td>
</tr>
<tr>
<td>QUARTZ, CRYSTALLINE SILICA</td>
<td>238-878-4</td>
<td>14808-60-7</td>
<td>1-10%</td>
<td>Xn;R20.</td>
</tr>
</tbody>
</table>

The Full Text for all R-Phrases are Displayed in Section 16

CAS-NO. 13462-86-7

COMPOSITION COMMENTS
The data shown is in accordance with the latest EC Directives. Barite is a naturally occurring mineral. Prolonged and repeated exposure to concentrations of crystalline silica exceeding the maximum exposure limit may lead to chronic lung disease such as silicosis.

3 HAZARDS IDENTIFICATION

Not regarded as a health or environmental hazard under current legislation.

HUMAN HEALTH
This product contains a small quantity of quartz. IARC Monographs, Vol.68, 1997, concludes that there is sufficient evidence that inhaled crystalline silica in the form of quartz or crystobalite from occupational sources causes cancer in humans. IARC classification Group 1.

4 FIRST-AID MEASURES

INHALATION
Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

INGESTION
First aid is not normally required. Rinse mouth thoroughly. Drink plenty of water.

SKIN CONTACT
Wash skin thoroughly with soap and water. Remove contaminated clothing. Get medical attention if any discomfort continues.

EYE CONTACT
Promptly wash eyes with plenty of water while lifting the eye lids. Get medical attention if any discomfort continues.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA
The product is non-combustible. Use fire-extinguishing media appropriate for surrounding materials.

SPECIAL FIRE FIGHTING PROCEDURES
No specific fire fighting procedure given.

UNUSUAL FIRE & EXPLOSION HAZARDS
No unusual fire or explosion hazards noted.

SPECIFIC HAZARDS
Not relevant.

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS
Wear protective clothing as described in Section 8 of this safety data sheet.
ENVIRONMENTAL PRECAUTIONS
Do not allow to enter drains, sewers or watercourses.

SPILL CLEAN UP METHODS
Shovel into dry containers. Cover and move the containers. Flush the area with water.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS
Avoid handling which leads to dust formation. Provide good ventilation. Mechanical ventilation or local exhaust ventilation may be required. Do not use contact lenses.

STORAGE PRECAUTIONS
Store at moderate temperatures in dry, well ventilated area. Keep containers tightly closed.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Name</th>
<th>Std</th>
<th>LT - ppm</th>
<th>LT - mg/m³</th>
<th>ST - ppm</th>
<th>ST - mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUARTZ, CRYSTALLINE SILICA</td>
<td>WEL</td>
<td></td>
<td>0.3 mg/m³</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BARIUM SULPHATE</td>
<td>WEL</td>
<td></td>
<td>4 mg/m³ resp. dust</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

INGREDIENT COMMENTS
Quartz, crystalline silica: Workplace exposure levels have been identified for the following countries: WEL = Workplace Exposure Limits Australia, Austria, Belgium, China, Denmark, Egypt, Estonia, Finland, France, Germany, Hong Kong, Hungary, Iceland, Indonesia, Ireland, Korea, Malaysia, Netherlands, New Zealand, Norway, Philippines, Poland, Portugal, Russia, Singapore, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Taiwan, and Thailand. Depending on country, the Quartz Workplace Exposure Limit varies from 0.05 mg/m³ (respirable fraction) through to 4 mg/m³ total dust. The quartz component of this product is currently being reviewed by the (UK) HSE. As a result they have issued Chemical Hazard Alert Notice 35. It states that although the present limit is set at 0.3 mg/m³ (8-hour TWA) employers should aim to control exposure to 0.1 mg/m³ (8-hour TWA) or below, until the new guidelines are issued.

PROTECTIVE EQUIPMENT

ENGINEERING MEASURES
Provide adequate general and local exhaust ventilation.

RESPIRATORY EQUIPMENT
Respiratory protection must be used if air contamination exceeds acceptable level. Dust filter P3 (for especially fine dust/powder).

HAND PROTECTION
No specific hand protection noted, but gloves may still be advisable. For prolonged or repeated skin contact use suitable protective gloves. Rubber or plastic.

EYE PROTECTION
Wear dust resistant safety goggles where there is danger of eye contact.

OTHER PROTECTION
Wear appropriate clothing to prevent repeated or prolonged skin contact. Provide eyewash station.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE Powder, dust

COLOUR Tan to Grey

ODOUR Odourless or No characteristic odour.

SOLUBILITY Insoluble in water

MELTING POINT (°C) 1580

RELATIVE DENSITY 4.2 - 4.25 20°C

BULK DENSITY 1920 - 2400 kg/m³

10 STABILITY AND REACTIVITY

STABILITY
Stable under normal temperature conditions.

CONDITIONS TO AVOID
Avoid wet and humid conditions.

MATERIALS TO AVOID
No incompatible groups noted.

HAZARDOUS DECOMPOSITION PRODUCTS
No specific hazardous decomposition products noted.
## 11 TOXICOLOGICAL INFORMATION

### TOXICOLOGICAL INFORMATION

**Acute toxicity.** LD50. Oral. Rat. > 20000 mg/kg

**INHALATION**

Dust may irritate respiratory system or lungs. Harmful: danger of serious damage to health by prolonged exposure through inhalation.

**INGESTION**

May cause discomfort if swallowed.

**SKIN CONTACT**

Powder may irritate skin.

**EYE CONTACT**

Particles in the eyes may cause irritation and smarting.

**HEALTH WARNINGS**

Prolonged and repeated exposure by inhalation to concentrations of crystalline silica exceeding the maximum exposure limit may lead to chronic lung disease such as silicosis.

## 12 ECOLOGICAL INFORMATION

**ECOTOXICITY**

Not regarded as dangerous for the environment. This material is a naturally occurring mineral. OSPAR have defined this chemical as PLONOR.

## 13 DISPOSAL CONSIDERATIONS

**DISPOSAL METHODS**

Recover and reclaim or recycle, if practical. Dispose of waste and residues in accordance with local authority requirements.

## 14 TRANSPORT INFORMATION

**GENERAL**

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

## 15 REGULATORY INFORMATION

### RISK PHRASES

<table>
<thead>
<tr>
<th>Type</th>
<th>Value</th>
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<td>R20</td>
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<tbody>
<tr>
<td>HC</td>
<td>N/A</td>
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</tbody>
</table>

### UK REGULATORY REFERENCES

Chemicals (Hazard Information & Packaging) Regulations. The Control of Substances Hazardous to Health Regulations

**EU DIRECTIVES**


**STATUTORY INSTRUMENTS**

Chemicals (Hazard Information and Packaging) Regulations.

**GUIDANCE NOTES**

Workplace Exposure Limits EH40.

## 16 OTHER INFORMATION

**GENERAL INFORMATION**

HMIS Health: 1 HMIS Flammability: 0 HMIS Physical Hazard: 0 E - Safety glasses, Gloves, Dust Respirator

**INFORMATION SOURCES**

Material Safety Data Sheet, Misc. manufacturers. Micromedex.

**REVISION COMMENTS**

Revised by Silvia Smart. The following sections have been revised: 8

**ISSUED BY**

Dr. Kirsty Walker

**REV. NO./REPL. SDS GENERATED**

17-01-06

**SDS NO.**

10610

**RISK PHRASES IN FULL**

R20 Harmful by inhalation.
DISCLAIMER

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