SAFETY DATA SHEET

SUPERSET MORTAR

100 Bollard Road
Tuakau
New Zealand
Telephone 0800 374 566

Issue date 27 August 2010

Section 1: IDENTIFICATION OF SUBSTANCE AND SUPPLIER

Product name: SUPERSET MORTAR
CAS number: Unassigned

Recommended uses: For applications where early strength and quick turn around is required, including repair of highways and bridges, airfield runways, parking decks and ramps, public footpaths and steps, floors and joints, road kerbs, drains, leaks, cracks, swimming pools.

Company Details: Dricon, Firth Industries.
Address: 100 Bollard Rd., Tuakau.
Telephone Number: 0800 – 374 566
Hours: 8.00 am – 5.00 pm Monday to Friday

Emergency Telephone Number:
(07) 870 2024 8.00am to 5.00pm Monday to Friday except public holidays.
(0800) 764-766 24 hours.

National Poisons Centre,
Department of Preventative and Social Medicine,
University of Otago,
P O Box 913,
Dunedin,
New Zealand.

Date of Revision: 27 August 2010

Section 2: HAZARDS IDENTIFICATION

Hazard Classification: Classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001

HSNO Approval Number: Classified under the group standard:
Construction Products (toxic [6.7A]) Group Standard 2006

HSNO Approval Number: HSR002545

Hazard classification: 6.1 E Acutely toxic
6.3A Skin irritant
6.5A Respiratory sensitiser
6.5B Contact sensitiser
6.7A Carcinogenic
6.9B Target organ toxicant
8.3A Eye corrosive
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DANGER:
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause cancer
Causes serious eye damage

WARNING:
If medical advice is needed have product container or label at hand
Keep out of reach of children
May be harmful if inhaled and cause respiratory irritation
Causes skin irritation including allergic skin irritations

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sand</td>
<td>40 - 70%</td>
</tr>
<tr>
<td>Cement</td>
<td>30 - 50%</td>
</tr>
<tr>
<td>Fast setting additive</td>
<td>5 – 20%</td>
</tr>
<tr>
<td>Admixtures</td>
<td>0 – 2%</td>
</tr>
</tbody>
</table>

Sand

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS number</th>
<th>Content (%w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica – crystalline (quartz)</td>
<td>14808-60-7</td>
<td>&lt;50%</td>
</tr>
<tr>
<td>Naturally occurring metal oxides</td>
<td>Not known</td>
<td>&lt;5%</td>
</tr>
<tr>
<td>Innocuous silicates</td>
<td>Not known</td>
<td>Balance</td>
</tr>
</tbody>
</table>

Cement

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS numbers</th>
<th>Concentration % by weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tri calcium silicate</td>
<td>12168 – 85 – 3</td>
<td>42 – 70</td>
</tr>
<tr>
<td>Di calcium silicate</td>
<td>1003 – 77- 2</td>
<td>15 – 30</td>
</tr>
<tr>
<td>Tri calcium aluminate</td>
<td>12042 – 78- 3</td>
<td>1 – 13</td>
</tr>
<tr>
<td>Tetra calcium alumino ferrite</td>
<td>12068 – 35 – 8</td>
<td>1 – 15</td>
</tr>
<tr>
<td>Magnesium oxide</td>
<td>1309 – 48 – 4</td>
<td>0.1 – 2.0</td>
</tr>
<tr>
<td>Calcium oxide</td>
<td>1305 – 78 – 8</td>
<td>0 – 3</td>
</tr>
<tr>
<td>Sodium salts</td>
<td></td>
<td>0.1 – 0.7</td>
</tr>
<tr>
<td>Potassium salts</td>
<td></td>
<td>0.1 – 1.0</td>
</tr>
<tr>
<td>Gypsum</td>
<td>13397 – 24 – 5</td>
<td>4 – 7</td>
</tr>
<tr>
<td>Ground granulated blast furnace slag</td>
<td></td>
<td>0 - 65</td>
</tr>
</tbody>
</table>
Fast setting additive

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS number</th>
<th>Content (%w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium aluminate</td>
<td>11104 – 48 - 6</td>
<td>40 – 60%</td>
</tr>
<tr>
<td>Calcium sulphate</td>
<td>7778 – 18 - 9</td>
<td>40 – 60%</td>
</tr>
</tbody>
</table>

Section 4: FIRST AID MEASURES

Swallowed: Rinse mouth. No NOT induce vomiting. Call the doctor / physician or poison centre

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing for at least 15 minutes. Keep patient calm. Immediately call the doctor or poison centre

Skin: Remove contaminated clothing and wash skin with plenty of soap and water. Seek medical attention if irritation or rash develops. If concerned, seek medical advice. Launder contaminated clothing before reuse

Inhaled: Remove to fresh air. Do not induce vomiting. If breathing is difficult keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms, or feeling unwell, call the poison centre or doctor

Required instructions: For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or contact a doctor

Workplace facilities: Eye wash and safety shower facilities are recommended

Section 5: FIRE FIGHTING MEASURES

Type of hazard: Not classed as flammable
Fire hazard properties: Non flammable. No fire or explosion hazard exists
Regulatory requirements: Not applicable
Extinguishing media and methods: Not applicable
Hazchem code for fire: Not applicable
Recommended protective clothing: Not applicable

Section 6: ACCIDENTAL RELEASE MEASURES

For 24 hour poison advice call 0800 POISON (0800 764 766)
Emergency procedures: If spilt (bulk) contact emergency services if applicable. Wear dust proof goggles, PVC / rubber gloves, a Class P1 (Particulate) respirator (where an inhalation risk exists), coveralls and rubber boots. Prevent spill from entering drains or waterways. Collect and place in sealable containers for disposal. Avoid generating dust.

Section 7: HANDLING AND STORAGE

Precautions for safe handling: Read label and safety data sheet before use. Obtain special instructions. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Wear protective gloves, eye and face protection. Use only in a well ventilated area.

Regulatory requirements: Approved handlers and tracking not required. Corrosive signage where quantities greater than 1 000kg are present. Emergency response plans for toxic response are required where quantities greater than 1 000kg are present. Corrosive emergency response plans are required when holding more than 10 000kg.

Handling practices: Avoid contact with eyes and wear eye protection. Keep containers adequately sealed during material transfer, transport, or when not in use. Use safe work practices to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas (e.g. if container is damaged). Wash exposed skin thoroughly after handling.

Conditions for safe storage: Ensure packages are adequately labelled, protected from physical damage and sealed when not in use.

Store site requirements: Store in a cool, dry, well-ventilated areas, away from moisture, oxidising agents (e.g. hydrogen fluoride, phosphorus oxide), acids, ethanol, interhalogens (e.g. chlorine trifluoride) and foodstuffs.
Packaging: Ensure packages are labelled, protected from physical damage and sealed when not in use.

Section 8: EXPOSURE CONTROL / PERSONAL PROTECTION

Workplace exposure standards:
- Lime (1305–78–8) TWA 2 mg/m³
- Silica, crystalline – quartz (14808-60-7) TWA 10 mg/m³
- Aluminium oxide (1344-28-1) TWA 10 mg/m³ (note: the value is for inspirable dust containing no asbestos and less than 1% free silica)
- Ferric oxide (1309-37-1) TWA 5 mg/m³
- Sodium oxide (1313-59-3) data not available
- Hexavalent chromium (Cr(VI)) (18540-29-9) TWA 0.05 mg/m³

Application in the workplace:
Use with adequate natural ventilation. Where dust inhalation hazard exists, mechanical extraction ventilation is recommended

Exposure standards outside the workplace:
No TEEL or EEL is set for this substance at this time

Engineering controls:
Where possible ventilation should be used (with suitable dust trap or filter) to maintain the environment below the workplace exposure standard

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Loose material consisting of sand and cement
pH: 11 – 13
Melting point: > 1 200 °C
Vapour pressure: Not known
Solubility: < 10g/L

Section 10: STABILITY AND REACTIVITY

Stability of the product: Stable
Conditions to avoid: Water contact may increase the product temperature 2-3 °C  
Wet cement dust is alkaline. It is incompatible with oxidizing agents (e.g. hypochlorites), ethanol, acids (e.g. hydrofluoric acid) and interhalogens (e.g. chlorine trifluoride)
Material to avoid:
Hazardous decomposition products: May evolve toxic gases if heated to decomposition

Section 11: TOXICOLOGICAL INFORMATION

For 24 hour poison advice call 0800 POISON (0800 764 766)
Summary

Corrosive.
Avoid eye and skin contact or dust inhalation.
This product has the potential to cause acute and chronic health effects with prolonged exposure
This product contains crystalline silica.
Prolonged or repeated inhalation of respirable crystalline silica from this product can cause silicosis, a serious harm disease which can lead to fatal lung disease.

Eye
Corrosive.
Severe irritant upon contact with powder / dust.
Over exposure may result in pain, redness, corneal burns and ulceration with possible permanent damage

Inhalation
Corrosive.
Over exposure may result in severe mucous membrane irritation and bronchitis.
Hexavalent chromium is reported to cause respiratory sensitization, however due to the trace amounts present a hazard is not anticipated under normal conditions of use.

Ingestion
Corrosive.
Ingestion may result in burns to the mouth and throat, with vomiting and abdominal pain. Due to product form, ingestion is not considered a likely exposure route

Skin
Corrosive. Prolonged and repeated contact with powder or wetted form may result in skin rash, dermatitis sensitisation.

TEL
No TEL is set for this substance at this time.

Section 12: ENVIRONMENTAL INFORMATION

Aquatic
Not classified as an aquatic ecotoxic under the Hazardous Substances and New Organisms Act

Soil
Not classified as an soil ecotoxic under the Hazardous Substances and New Organisms Act

Terrestrial vertebrates
Not classified as toxic to terrestrial vertebrates under the Hazardous Substances and New Organisms Act

Terrestrial invertebrates
Not classified as toxic to terrestrial invertebrates under the Hazardous Substances and New Organisms Act

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EEL

No EEL is set for this substance at this time

Section 13: DISPOSAL CONSIDERATIONS

Disposal information

Reuse or recycle where possible. Alternatively, ensure product is covered with moist soil to prevent dust generation and dispose of to an approved landfill site

Section 14: TRANSPORT INFORMATION

Relevant information: None

Other requirements: Not regulated for transport purposes

Section 15: REGULATORY INFORMATION


Section 16: OTHER INFORMATION

Relevant information

mg/m³ – milligrams per cubic metre
ppm – parts per million
TWA – time weighted average
pH – relates to hydrogen ion concentration – this value relates to a scale of 0 – 14 where 0 is highly acidic and 14 is highly alkaline

Additional information: None

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