MATERIAL SAFETY DATA SHEET

PRODUCT NAME: FELDSPAR

ChemWatch Material Safety Data Sheet

CHEMWATCH 5038-15

Date of Issue: June 2011

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IDENTIFICATION

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STATEMENT OF HAZARDOUS NATURE

Not classified as hazardous according to Worksafe Australia criteria

SUPPLIER

Company: W.J. Murdoch & Co.
Address: PO Box 981, Mudgee NSW 2850
Telephone: 02 6373 6537
Emergency Tel: 02 6373 6537
Fax: 02 6373 6556

Product Name: Murdoch Mudgee Feldspar
Other Names: Mudgee Feldspar

CAS RN No(s): 68476-25-5
UN Number: None
Dangerous Goods Class: None
Subsidiary Risk: None
Hazchem Code: None
Poisons Schedule Number: None
USE

In the manufacture of ceramics, tiles, sanitary ware. As a filler in glass fibre insulating materials; adhesives, coatings. Component of powder cleaners, scouring powders.

PHYSICAL DESCRIPTION/PROPERTIES

APPEARANCE

White to off-white granules/ powder, insoluble in water. No odour.
Size gradings from 0.8mm to 75 micron (0.075 mm).

Boiling Point (deg C): Not applicable
Melting Point (deg C): 1100
Vapour Pressure (kPa): Negligible
Specific Gravity: 2.6
Flash Point (deg C): Non Combustible
Lower Explosive Limit (%): Not applicable
Upper Explosive Limit (%): Not applicable
Solubility in Water (g/L): Immiscible

INGREDIENTS

<table>
<thead>
<tr>
<th>NAME</th>
<th>CAS RN</th>
<th>%</th>
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<tbody>
<tr>
<td>chemical analysis as silicon dioxide (SiO2), as quartz</td>
<td>14808-60-7</td>
<td>40-45</td>
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<tr>
<td>aluminium oxide</td>
<td>1344-28-1</td>
<td>13-14</td>
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<tr>
<td>potassium monoxide</td>
<td>12136-45-7</td>
<td>7-9^</td>
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<tr>
<td>sodium monoxide</td>
<td>1313-59-3</td>
<td>1-2^</td>
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<td>calcium oxide</td>
<td>1305-78-8</td>
<td>0.25-0.</td>
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<tr>
<td>magnesium oxide</td>
<td>1309-48-4.</td>
<td>&lt;0.05^</td>
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<tr>
<td>titanium dioxide</td>
<td>13463-67-7</td>
<td>&lt;0.05^</td>
</tr>
<tr>
<td>contains typically silica of respirable size</td>
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<td>&lt;1</td>
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</table>

HEALTH HAZARD

ACUTE HEALTH EFFECTS

SWALLOWED

Considered an unlikely route of entry in commercial/industrial environments.
Not normally a hazard due to the physical form of product.
The material is a physical irritant to the gastro-intestinal tract and is considered to be non toxic.
**EYE**
Generated dust may be highly discomforting and may be abrasive to the eyes.

**SKIN**
The material may be mildly discomforting and abrasive to the skin and may cause drying of the skin if contact is prolonged.

**INHALED**
Generated dust may be discomforting to the upper respiratory tract and may cause a physical obstruction of breathing passages, choking or may be harmful if exposure is prolonged. Inhalation of dust may aggravate a pre-existing respiratory condition such as asthma, bronchitis, emphysema. Overexposure to respirable dust may cause coughing, wheezing, difficulty in breathing and even impaired lung function.

**CHRONIC HEALTH EFFECTS**
Principal routes of exposure are usually by inhalation of generated dust and skin contact with the material. Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following long term exposure to high dust concentrations may cause changes in lung function i.e.pneumoconiosis; caused by particles less than 0.5 micron penetrating and remaining in the lung.

Prime symptom is breathlessness; lung shadows show on X-ray.

Chronic symptoms produced by crystalline silicas include decreased vital lung capacity and chest infections. Lengthy exposure may cause silicosis which is a disabling form of lung inflammation. Symptoms may appear 8-18 months after initial exposure and smokers are at increased risk.

**FIRST AID**

**SWALLOWED**
Rinse mouth out with plenty of water.
If poisoning occurs, contact a doctor or Poisons Information Centre.
If swallowed, do NOT induce vomiting. Give a glass of water.

**EYE**
If this product comes in contact with the eyes:
1: Immediately hold the eyes open and wash with fresh running water.
2: Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
3: If pain persists or recurs seek medical attention.
4: Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
SKIN

If product comes in contact with the skin:
1: Wash affected areas thoroughly with water (and soap if available).
2: Seek medical attention in event of irritation.

INHALED

1: If dust is inhaled, remove to fresh air.
2: Encourage patient to blow nose to ensure clear breathing passages.
3: Ask patient to rinse mouth with water but to not drink water.
4: Seek immediate medical attention.

ADVICE TO DOCTOR

Treat symptomatically.
Long term exposure to high dust concentrations may cause changes in lung function i.e. pneumoconiosis; caused by particles less than 0.5 micron penetrating and remaining in the lung. Prime symptom is breathlessness; lung shadows show on X-ray.

PRECAUTIONS FOR USE

EXPOSURE STANDARDS

None assigned. Refer to individual constituents.

<quartz>
TLV TWA: 0.1 mg/m³ (respirable dust)
The concentration of respirable dust for application of this limit is to be determined from the fraction that penetrates a separator whose size collection efficiency is described by a cumulative lognormal function with a median aerodynamic volume of 4.0 um (±) 0.3 um and with a geometric standard deviation of 1.5 um (±) 0.1 um, i.e., less than 5 um.
NOTICE OF INTENDED CHANGE
TLV TWA 0.05 mg/m³ (respirable dust) A2
WARNING: For inhalation exposure ONLY:
This substance has been classified by the ACGIH as A2
Suspected Human Carcinogen.
ES TWA: 0.2 mg/m³
MEL TWA: 0.3 mg/m³ (respirable dust)
Because the margin of safety of the quartz TLV is not known with certainty and given the associated link between silicosis and lung cancer it is recommended that quartz concentrations be maintained as far below the TLV as prudent practices will allow.

<aluminium oxide>
aluminium oxide, containing no asbestos and < 1% crystalline silica
ES TWA: 10 mg/m³ inspirable dust
TLV TWA: 10 mg/m³ total dust A4
NOTE: This substance has been classified by the ACGIH as A4
       NOT classifiable as causing Cancer in humans.
OES TWA: 10 mg/m³ total inhalable dust
OES TWA: 4 mg/m³ respirable dust
MAK value: 6 mg/m³
- measured as the respirable fraction of the aerosol
MAK values, and categories and groups are those recommended within the
Federal Republic of Germany.
The experimental and clinical data indicate that aluminium oxide acts as an
"inert" material when inhaled and seems to have little effect on the lungs
nor does it produce significant organic disease or toxic effects when
exposures are kept under reasonable control.
[Documentation of the Threshold Limit Values], ACGIH, Sixth Edition

ENGINEERING CONTROLS

Use in a well-ventilated area.
Local exhaust ventilation may be required for safe working, i.e. to keep exposures below required
standards, otherwise PPE is required. If exposure to workplace dust is not controlled, respiratory protection
is required; wear SAA approved dust respirator. Provide adequate ventilation in warehouse or closed
storage areas.

PERSONAL PROTECTION

EYE

Safety glasses with side shields; or as required, Chemical goggles.
Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them.

HANDS/FEET

Wear physical protective gloves, eg. leather.
Wear safety footwear.

OTHER

1: Overalls.
2: Eyewash unit.

RESPIRATOR

<table>
<thead>
<tr>
<th>Protection Factor</th>
<th>Half-Face Respirator</th>
<th>Full-Face Respirator</th>
<th>Powered Air Respirator</th>
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<tr>
<td>10 x ES</td>
<td>P1</td>
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<td>PAPR-P1</td>
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<td>Air-line*</td>
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<td>Air-line**</td>
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<td>-</td>
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<tr>
<td>100+ x ES</td>
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<td>Air-line**</td>
<td>PAPR-P3</td>
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</tbody>
</table>
SAFE HANDLING

STORAGE AND TRANSPORT

SUITABLE CONTAINER

25 kilo bags or Bulk or Bulka bags.

STORAGE INCOMPATIBILITY

No known incompatibility with normal range of industrial materials.

STORAGE REQUIREMENT

Stored in bulk or bags.
1: Keep dry.
2: Store under cover.
3: Protect containers against physical damage.
4: Observe manufacturer's storing and handling recommendations.

TRANSPORTATION

No restrictions.

SPILLS AND DISPOSAL

MINOR SPILLS

1: Clean up waste regularly and abnormal spills immediately.
2: Use dry clean up procedures and avoid generating dust.
3: Vacuum up or sweep up.
   NOTE: Vacuum cleaner must be fitted with an exhaust micro filter (HEPA type)
4: Dampen with water to prevent dusting before sweeping.
5: Place in suitable containers for disposal.
MAJOR SPILLS

Minor hazard. 1: Clear area of personnel and move upwind. 2: Use dry clean up procedures. Avoid generating dust. 3: If inhalation risk of exposure exists, wear SAA approved dust respirator. 4: Collect recoverable product into labelled containers for recycling.

DISPOSAL

1: Recycle wherever possible or consult manufacturer for recycling options. 2: Consult State Land Waste Management Authority for disposal. 3: Bury residue in an authorised landfill.

FIRE/EXPLOSION HAZARD

1: Non combustible. 2: Not considered to be a significant fire risk, however containers may burn.

CONTACT POINT

CONTACT

AUSTRALIAN POISONS INFORMATION CENTRE
24 HOUR SERVICE :- 13 11 26
POLICE OR FIRE BRIGADE :- 000 (exchange):-1100

NEW ZEALAND POISONS INFORMATION CENTRE
    Dunedin :-(03)479 1200 (Normal Hours)
             :-(03)474 0999 (Emergency)

End of Report

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