**Chemwatch Material Safety Data Sheet** 

Issue Date: 28-Sep-2012

X9317SP

**Hazard Alert Code: HIGH** 

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## Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

## PRODUCT NAME

Mapei Keraflex

## **SYNONYMS**

"cement based adhesive"

#### **PRODUCT USE**

Cement based powder adhesive.

(VOC per CA South Coast Air Quality Management District, Rule 1168)

#### **SUPPLIER**

Company: Mapei Australia Pty Ltd

Address: 12 Parkview Drive Acherfield, QLD 4108

Australia

Telephone: 07- 32765000 (Mon- Fri 9am- 5pm)

Fax: 07- 32765076

Company: Mapei New Zealand Ltd

Address: 30 Fisher Cresent Mt Wellington, Auckland

New Zealand

Telephone: +64 9 921 1994

Telephone: (03) 479 1200 (normal hours) - New

Zealand Poisons information centre Emergency Tel: (03) 474 0999

## **Section 2 - HAZARDS IDENTIFICATION**

## STATEMENT OF HAZARDOUS NATURE

HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS. According to the Criteria of NOHSC, and the ADG Code.

RISK

■ Causes burns.

■ Risk of serious damage

to eyes.

SAFETY

• Keep locked up.

• Do not breathe dust.

· Avoid contact with skin.

Avoid contact with eyes.Wear suitable protective clothing.

Wear suitable gloves.

Wear eye/face protection.

• To clean the floor and all objects contaminated by this material, use

water and detergent.

· Take off immediately all contaminated clothing.

• In case of contact with eyes, rinse with plenty of water and contact

Doctor or Poisons Information Centre.

• In case of accident or if you feel unwell IMMEDIATELY contact Doctor

or Poisons Information Centre (show label if possible).

## **Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS**

 NAME
 CAS RN
 %

 portland cement
 65997-15-1
 10-60

 fillers
 10-60

 additives
 1-10

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## **Section 4 - FIRST AID MEASURES**

#### **SWALLOWED**

- For advice, contact a Poisons Information Centre or a doctor at once.
- Urgent hospital treatment is likely to be needed.
- If swallowed do NOT induce vomiting.
- If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.

#### **FYF**

- If this product comes in contact with the eyes:
- Immediately hold eyelids apart and flush the eye continuously with running water.
- 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.
- Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.
- Transport to hospital or doctor without delay.

#### SKIN

- If skin or hair contact occurs:
- Immediately flush body and clothes with large amounts of water, using safety shower if available.
- · Quickly remove all contaminated clothing, including footwear.
- · Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre.
- · Transport to hospital, or doctor.

#### **INHALED**

- If fumes or combustion products are inhaled remove from contaminated area.
- · Lay patient down. Keep warm and rested.
- Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
- Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.

## **NOTES TO PHYSICIAN**

For acute or short-term repeated exposures to highly alkaline materials:

- Respiratory stress is uncommon but present occasionally because of soft tissue edema.
- Unless endotracheal intubation can be accomplished under direct vision, cricothyroidotomy or tracheotomy may be necessary.
- Oxygen is given as indicated.
- The presence of shock suggests perforation and mandates an intravenous line and fluid administration.

## **Section 5 - FIRE FIGHTING MEASURES**

## **EXTINGUISHING MEDIA**

- There is no restriction on the type of extinguisher which may be used.
- Use extinguishing media suitable for surrounding area.

## **FIRE FIGHTING**

- Alert Fire Brigade and tell them location and nature of hazard.
- · Wear breathing apparatus plus protective gloves in the event of a fire.
- Prevent, by any means available, spillage from entering drains or water courses.
- · Use fire fighting procedures suitable for surrounding area.

## FIRE/EXPLOSION HAZARD

- · Non combustible.
- · Not considered a significant fire risk, however containers may burn.

Decomposition may produce toxic fumes of: metal oxides.

May emit poisonous fumes.

May emit corrosive fumes.

## FIRE INCOMPATIBILITY

■ None known

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#### **HAZCHEM**

None

## Section 6 - ACCIDENTAL RELEASE MEASURES

## MINOR SPILLS

- · Remove all ignition sources.
- · Clean up all spills immediately.
- · Avoid contact with skin and eyes.
- Control personal contact with the substance, by using protective equipment.

## **MAJOR SPILLS**

Moderate hazard.

- · CAUTION: Advise personnel in area.
- · Alert Emergency Services and tell them location and nature of hazard.
- · Control personal contact by wearing protective clothing.
- Prevent, by any means available, spillage from entering drains or water courses.

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

## **Section 7 - HANDLING AND STORAGE**

## PROCEDURE FOR HANDLING

- Avoid all personal contact, including inhalation.
- · Wear protective clothing when risk of exposure occurs.
- · Use in a well-ventilated area.
- · Prevent concentration in hollows and sumps.

## SUITABLE CONTAINER

- · Polyethylene or polypropylene container.
- · Check all containers are clearly labelled and free from leaks.

### STORAGE INCOMPATIBILITY

None known.

## STORAGE REQUIREMENTS

- Store in original containers.
- Keep containers securely sealed.
- Store in a cool, dry area protected from environmental extremes.
- · Store away from incompatible materials and foodstuff containers.

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

#### **EXPOSURE CONTROLS** STEL **TWA** Source Material **TWA TWA** STFL Peak Peak Notes F/CC ppm mg/m<sup>3</sup> ppm mg/m<sup>3</sup> ppm mg/m<sup>3</sup> Australia portland cement 10 (see Chapter 14)

Exposure (Portland cement

Standards (a))

## MATERIAL DATA

MAPEI KERAFLEX:

None assigned. Refer to individual constituents.

PORTLAND CEMENT:

for calcium silicate:

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containing no asbestos and <1% crystalline silica

ES TWA: 10 mg/m3 inspirable dust

TLV TWA: 10 mg/m3 total dust (synthetic nonfibrous) A4

Although in vitro studies indicate that calcium silicate is more toxic than substances described as "nuisance dusts" is thought that adverse health effects which might occur following exposure to 10-20 mg/m3 are likely to be minimal. The TLV-TWA is thought to be protective against the physical risk of eye and upper respiratory tract irritation in workers and to prevent interference with vision and deposition of particulate in the eyes, ears, nose and mouth.

For calcium oxide:

The TLV-TWA is thought to be protective against undue irritation and is analogous to that recommended for sodium hydroxide.

The concentration of dust, for application of respirable dust limits, is to be determined from the fraction that penetrates a separator whose size collection efficiency is described by a cumulative log-normal function with a median aerodynamic diameter of  $4.0 \mu m (+-) 0.3 \mu m$  and with a geometric standard deviation of  $1.5 \mu m (+-) 0.1 \mu m$ , i.e., generally less than  $5 \mu m$ .

NOTE: This substance has been classified by the ACGIH as A4 NOT classifiable as causing Cancer in humans.

Portland cement is considered to be a nuisance dust that does not cause fibrosis and has little potential to induce adverse effects on the lung.

## PERSONAL PROTECTION

#### RESPIRATOR

Particulate. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

#### **EYE**

- · Chemical goggles.
- Full face shield may be required for supplementary but never for primary protection of eyes
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent].

## HANDS/FEET

· Wear chemical protective gloves, e.g. PVC.

· Wear safety footwear or safety gumboots, e.g. Rubber.

- NOTE:
- The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other
  protective equipment, to avoid all possible skin contact.
- Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed.

## OTHER

- Overalls.
- P.V.C. apron.
- · Barrier cream.
- · Skin cleansing cream.

## **ENGINEERING CONTROLS**

■ Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

## **Section 9 - PHYSICAL AND CHEMICAL PROPERTIES**

## **APPEARANCE**

Fine grey powder with a slight typical cement odour; slightly soluble in water

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Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

#### PHYSICAL PROPERTIES

Solid.

Does not mix with water.

Sinks in water.

Alkaline.

State	Divided solid	Molecular Weight	Not Applicable
Melting Range (°C)	Not Available	Viscosity	Not Applicable
Boiling Range (°C)	Not Applicable	Solubility in water (g/L)	Partly miscible
Flash Point (°C)	Not Applicable	pH (1% solution)	12 (slurry)
Decomposition Temp (°C)	Not Available	pH (as supplied)	Not Applicable
Autoignition Temp (°C)	Not Applicable	Vapour Pressure (kPa)	Not Available
Upper Explosive Limit (%)	Not Applicable	Specific Gravity (water=1)	1.5
Lower Explosive Limit (%)	Not Applicable	Relative Vapour Density	Not Applicable

(air=1)

Volatile Component (%vol) <0.1 g/l (VOC) Evaporation Rate Not Applicable

## Section 10 - STABILITY AND REACTIVITY

#### CONDITIONS CONTRIBUTING TO INSTABILITY

- · Presence of incompatible materials.
- · Product is considered stable.
- Hazardous polymerisation will not occur.

For incompatible materials - refer to Section 7 - Handling and Storage.

## **Section 11 - TOXICOLOGICAL INFORMATION**

## POTENTIAL HEALTH EFFECTS

## ACUTE HEALTH EFFECTS

# SWALLOWED

■ The material can produce chemical burns within the oral cavity and gastrointestinal tract following ingestion.

### EYE

■ The material can produce chemical burns to the eye following direct contact. Vapours or mists may be extremely irritating.

### SKIN

■ The material can produce chemical burns following direct contactwith the skin.

Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

## INHALED

■ Inhalation of dusts, generated by the material during the course of normal handling, may be damaging to the health of the individual.

The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.

Effects on lungs are significantly enhanced in the presence of respirable particles.

### **CHRONIC HEALTH EFFECTS**

■ Overexposure to respirable dust may cause coughing, wheezing, difficulty in breathing and impaired lung function. Chronic symptoms may include decreased vital lung capacity, chest infections

Repeated exposures, in an occupational setting, to high levels of fine- divided dusts may produce a condition known as pneumoconiosis which is the lodgement of any inhaled dusts in the lung irrespective of the effect.

Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound.

There is some evidence that inhaling this product is more likely to cause a sensitisation reaction in some persons compared to the general population.

There is limited evidence that, skin contact with this product is more likely to cause a sensitisation reaction in some persons compared to the general population.

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Respiratory sensitisation may result in allergic/asthma like responses; from coughing and minor breathing difficulties to bronchitis with wheezing, gasping.

## TOXICITY AND IRRITATION

■ Not available. Refer to individual constituents.

## Section 12 - ECOLOGICAL INFORMATION

No data

**Ecotoxicity** 

Ingredient

ingredient

Persistence: Water/Soil

Persistence: Air

Bioaccumulation

Mobility

portland cement

No Data Available No Data Available No Data Available No Data Available

## **Section 13 - DISPOSAL CONSIDERATIONS**

- · Containers may still present a chemical hazard/ danger when empty.
- Return to supplier for reuse/ recycling if possible.

Otherwise:

- If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.
- · Where possible retain label warnings and MSDS and observe all notices pertaining to the product.
- · Recycle wherever possible.
- Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.
- Dispose of by: burial in a land-fill specifically licenced to accept chemical and / or pharmaceutical wastes or Incineration in a licenced apparatus (after admixture with suitable combustible material)
- Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

## **Section 14 - TRANSPORTATION INFORMATION**

HAZCHEM:

None (ADG7)

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: ADG7, IATA, IMDG

## **Section 15 - REGULATORY INFORMATION**

Indications of Danger:

C Corrosive

POISONS SCHEDULE

None

**REGULATIONS** 

Regulations for ingredients

portland cement (CAS: 65997-15-1) is found on the following regulatory lists;

"Australia Exposure Standards", "Australia High Volume Industrial Chemical List (HVICL)", "Australia Inventory of Chemical

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Substances (AICS)", "OECD List of High Production Volume (HPV) Chemicals"

No data for Mapei Keraflex (CW: 5042-42)

## **Section 16 - OTHER INFORMATION**

- Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

  A list of reference resources used to assist the committee may be found at:

  www.chemwatch.net/references.
- The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings.

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This is the end of the MSDS.