Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME
Mapei Granirapid B

SYNONYMS
"synthetic polymer water based dispersion"

PRODUCT USE
Requires that the two parts be mixed by hand or mixer before use, in accordance with manufacturers directions. Mix only as much as is required. Do not return the mixed material to the original containers.
Part B of a two-pack cement based 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 Crescent
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
NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS. According to NOHSC Criteria, and ADG Code.

RISK
• None under normal operating conditions.

SAFETY
• None under normal operating conditions.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>NAME</th>
<th>CAS RN</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>styrene/ butadiene rubber latex</td>
<td>61789-96-6</td>
<td>&gt;60</td>
</tr>
<tr>
<td>bacteriacide</td>
<td>97255-35-3</td>
<td>&lt;1</td>
</tr>
<tr>
<td>pigment, unspecified</td>
<td></td>
<td>&lt; 1</td>
</tr>
<tr>
<td>water</td>
<td>7732-18-5</td>
<td>30-60</td>
</tr>
</tbody>
</table>

Section 4 - FIRST AID MEASURES

SWALLOWED
• Immediately give a glass of water.
• First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

EYE
• If this product comes in contact with eyes:
  • Wash out immediately with water.
  • If irritation continues, seek medical attention.
  • Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Section 4 - FIRST AID MEASURES

SKIN
■ If skin contact occurs:
  • Immediately remove all contaminated clothing, including footwear.
  • Flush skin and hair with running water (and soap if available).
  • Seek medical attention in event of irritation.

INHALED
• If fumes, aerosols or combustion products are inhaled remove from contaminated area.
• Other measures are usually unnecessary.

NOTES TO PHYSICIAN
Treat symptomatically.

Section 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA
• Water spray or fog.
• Foam.
• Dry chemical powder.
• BCF (where regulations permit).

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 to be a significant fire risk.
• Expansion or decomposition on heating may lead to violent rupture of containers.
• Decomposes on heating and may produce toxic/irritating fumes.
  May emit corrosive fumes.

FIRE INCOMPATIBILITY
■ None known.

HAZCHEM
None

Section 6 - ACCIDENTAL RELEASE MEASURES

MINOR SPILLS
Slippery when spilt.
• Clean up all spills immediately.
• Avoid breathing vapours and contact with skin and eyes.
• Control personal contact with the substance, by using protective equipment.
• Contain and absorb spill with sand, earth, inert material or vermiculite.

MAJOR SPILLS
Slippery when spilt.
Moderate hazard.
• Clear area of personnel and move upwind.
• Alert Fire Brigade and tell them location and nature of hazard.
• Wear breathing apparatus plus protective gloves.
• Prevent, by any means available, spillage from entering drains or water course.

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.
- Avoid contact with moisture.
- DO NOT allow clothing wet with material to stay in contact with skin.

**SUITABLE CONTAINER**
- Polyethylene or polypropylene container.
- Packing as recommended by manufacturer.
- 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, well-ventilated area.
- Store away from incompatible materials and foodstuff containers.

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**Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION**

**EXPOSURE CONTROLS**
The following materials had no OELs on our records
- styrene/butadiene rubber latex: CAS:61789-96-6
- water: CAS:7732-18-5

**MATERIAL DATA**
MAPEI GRANIRAPID B:
None assigned. Refer to individual constituents.

STYRENE/ BUTADIENE RUBBER LATEX:
Sensory irritants are chemicals that produce temporary and undesirable side-effects on the eyes, nose or throat. Historically occupational exposure standards for these irritants have been based on observation of workers' responses to various airborne concentrations.

- TLV TWA: 0.001 mg/m³ (as total proteins) Inhalable fraction skin sensitiser as rubber processing fume;
- MEL-TWA: 0.6 mg/m³ as cyclohexane solubles [HSE, UK]
- BRMA-TWA: 0.25 mg/m³ as cyclohexane solubles [BRMA Code of Practice]

Rubber fume is a complex and indeterminate mixture of substances and is defined as “fume evolved in the mixing, milling and blending of natural rubber and synthetic polymers combined with chemicals, and in the processes which convert the resultant blend into finished products or parts thereof, and including any inspection procedures where fume continues to be evolved”.

“Fume” generally describes solid particles generated by chemical reactions, or by condensation from the gaseous state, usually after volatilisation from melted substances, and often accompanied by a chemical reaction such as oxidation or thermal breakdown.

Several chemical agents may occur in rubber fume which are experimental or animal carcinogens, however, given the number of chemicals used or formed during rubber making, difficulties arise in attributing a particular effect to a given exposure.

Stomach cancer has been associated with work in jobs early in the production line; lung and lower oesophagus cancer with all work processes; and lymphomas with jobs where co-exposure to solvents occurs.

WATER:
No exposure limits set by NOHSC or ACGIH.

**PERSONAL PROTECTION**

continued...
Mapei Granirapid B

Chemwatch Material Safety Data Sheet
Issue Date: 16-Apr-2014
X9317SP

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

RESPIRATOR

EYE
- Safety glasses with side shields.
- Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses 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.

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**
White liquid with a characteristic odour.
Dispersible in water.

**PHYSICAL PROPERTIES**
Liquid.
Mixes with water.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>Liquid</td>
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<tr>
<td>Melting Range (°C)</td>
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<tr>
<td>Boiling Range (°C)</td>
<td>100</td>
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<tr>
<td>Flash Point (°C)</td>
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</tr>
<tr>
<td>Decomposition Temp (°C)</td>
<td>Not Available</td>
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<tr>
<td>Autoignition Temp (°C)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Upper Explosive Limit (%)</td>
<td>Not Applicable</td>
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<tr>
<td>Lower Explosive Limit (%)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Volatile Component (%vol)</td>
<td>0.34 g/l (VOC)</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>Not Applicable</td>
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<tr>
<td>Viscosity</td>
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<tr>
<td>Viscosity</td>
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<td>Solubility in water (g/L)</td>
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<tr>
<td>pH (1% solution)</td>
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<tr>
<td>pH (as supplied)</td>
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<tr>
<td>Vapour Pressure (kPa)</td>
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<tr>
<td>Specific Gravity (water=1)</td>
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<tr>
<td>Relative Vapour Density</td>
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<tr>
<td>(air=1)</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

continued...
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 has NOT been classified by EC Directives or other classification systems as “harmful by ingestion”. This is because of the lack of corroborating animal or human evidence. The material may still be damaging to the health of the individual, following ingestion, especially where pre-existing organ (eg. liver, kidney) damage is evident. Present definitions of harmful or toxic substances are generally based on doses producing mortality rather than those producing morbidity (disease, ill-health). Gastrointestinal tract discomfort may produce nausea and vomiting. In an occupational setting however, ingestion of insignificant quantities is not thought to be cause for concern.

EYE
■ Although the liquid is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn).

SKIN
■ There is some evidence to suggest that the material may cause mild but significant inflammation of the skin either following direct contact or after a delay of some time. Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering.

INHALED
■ There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Not normally a hazard due to non-volatile nature of product.

CHRONIC HEALTH EFFECTS
■ Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course.

TOXICITY AND IRRITATION
■ Not available. Refer to individual constituents.

CARCINOGEN
<table>
<thead>
<tr>
<th>Substance</th>
<th>International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs</th>
<th>Group</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>styrene/ butadiene rubber latex</td>
<td>D1: skin irritation/corrosion</td>
<td>3</td>
<td>Not classifiable as to its carcinogenicity to humans</td>
</tr>
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</table>

SKIN
<table>
<thead>
<tr>
<th>Substance</th>
<th>Profiles</th>
</tr>
</thead>
<tbody>
<tr>
<td>styrene/ butadiene rubber latex</td>
<td>GESAMP/EHS Composite List - GESAMP Hazard Profiles</td>
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continued...
Section 12 - ECOLOGICAL INFORMATION

No data

Ecotoxicity

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Persistence: Water/Soil</th>
<th>Persistence: Air</th>
<th>Bioaccumulation</th>
<th>Mobility</th>
</tr>
</thead>
<tbody>
<tr>
<td>styrene/ butadiene rubber latex</td>
<td>No Data</td>
<td>No Data</td>
<td>No Data</td>
<td>No Data</td>
</tr>
<tr>
<td></td>
<td>Available</td>
<td>Available</td>
<td>Available</td>
<td>Available</td>
</tr>
</tbody>
</table>

Section 13 - DISPOSAL CONSIDERATIONS

• 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

POISONS SCHEDULE
None

REGULATIONS

Regulations for ingredients

styrene/ butadiene rubber latex (CAS: 61789-96-6) is found on the following regulatory lists;

water (CAS: 7732-18-5) is found on the following regulatory lists;

No data for Mapei Granirapid B (CW: 5041-48)
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.