

# MAPEI KERASEAL

Chemwatch Material Safety Data Sheet  
Issue Date: Fri 1-Apr-2005

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## Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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### PRODUCT NAME

MAPEI KERASEAL

### SYNONYMS

"solvent borne protective porous tile sealer"

### PROPER SHIPPING NAME

PAINT

### PRODUCT USE

Solvent-borne protective sealer fo porous tiles.

### SUPPLIER

Company: Mapei Australia P/L

Address:

12 Parkview Drive

Archerfield

QLD, 4108

AUS

Telephone: +61 7 3276 5000

Fax: +61 7 3276 5076

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## Section 2 - HAZARDS IDENTIFICATION

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### STATEMENT OF HAZARDOUS NATURE

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

### POISONS SCHEDULE

S5

### RISK

Flammable.

Irritating to skin.

HARMFUL-May cause lung damage if swallowed.

Inhalation and/or ingestion may produce health damage\*.

Cumulative effects may result following exposure\*.

May produce discomfort of the eyes and respiratory tract\*.

Limited evidence of a carcinogenic effect\*.

Vapours potentially cause drowsiness and dizziness\*.

\* (limited evidence).

### SAFETY

Do not breathe gas/fumes/vapour/spray.

Avoid contact with eyes.

Wear suitable protective clothing.

Use only in well ventilated areas.

Keep container in a well ventilated place.

To clean the floor and all objects contaminated by this material, use water and detergent.

Keep container tightly closed.

Keep away from food, drink and animal feeding stuffs.

Take off immediately all contaminated clothing.

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Section 2 - HAZARDS IDENTIFICATION

In case of contact with eyes, rinse with plenty of water and contact Doctor or Poisons Information Centre.  
If swallowed, IMMEDIATELY contact Doctor or Poisons Information Centre. (show this container or label).  
If you feel unwell contact Doctor or Poisons Information Centre. (Show the label if possible).

## Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
white spirit	8052-41-3.	55-75
1,2-dichloropropane	78-87-5	5-10
other ingredients determined not to be hazardous		balance

## Section 4 - FIRST AID MEASURES

### SWALLOWED

If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.

- 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.
  - Observe the patient carefully.
  - Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.
  - Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.
  - Seek medical advice.
- Avoid giving milk or oils.  
Avoid giving alcohol.

### EYE

If this product comes in contact with the eyes:

- Wash out immediately with fresh 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.
- If pain persists or recurs seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

### 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 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.
- Transport to hospital, or doctor.

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Section 4 - FIRST AID MEASURES

## NOTES TO PHYSICIAN

Any material aspirated during vomiting may produce lung injury. Therefore emesis should not be induced mechanically or pharmacologically. Mechanical means should be used if it is considered necessary to evacuate the stomach contents; these include gastric lavage after endotracheal intubation. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours.

For acute or short term repeated exposures to petroleum distillates or related hydrocarbons:

- Primary threat to life, from pure petroleum distillate ingestion and/or inhalation, is respiratory failure.
- Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO<sub>2</sub> 50 mm Hg) should be intubated.
- Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.
- A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax.
- Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitisation to catecholamines. Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.
- Lavage is indicated in patients who require decontamination; ensure use of cuffed endotracheal tube in adult patients. [Ellenhorn and Barceloux: Medical Toxicology].

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## Section 5 - FIRE FIGHTING MEASURES

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### EXTINGUISHING MEDIA

- Foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.
- Water spray or fog - Large fires only.

### FIRE FIGHTING

- Alert Fire Brigade and tell them location and nature of hazard.
- May be violently or explosively reactive.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water course.
- If safe, switch off electrical equipment until vapour fire hazard removed.
- Use water delivered as a fine spray to control fire and cool adjacent area.
- Avoid spraying water onto liquid pools.
- DO NOT approach containers suspected to be hot.
- Cool fire exposed containers with water spray from a protected location.
- If safe to do so, remove containers from path of fire.

### FIRE/EXPLOSION HAZARD

- Hot organic vapours or mist are capable of sudden spontaneous combustion when mixed with air even at temperatures below their published autoignition temperatures.
- The temperature of ignition decreases with increasing vapour volume and

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Section 5 - FIRE FIGHTING MEASURES

vapour/air contact times and is influenced by pressure change.

- Ignition may occur under elevated-temperature process conditions especially in processes performed under vacuum subjected to sudden ingress of air or in processes performed at elevated pressure, where sudden escape of vapours or mists to the atmosphere occurs.
- Liquid and vapour are flammable.
- Moderate fire hazard when exposed to heat or flame.
- Vapour forms an explosive mixture with air.
- Moderate explosion hazard when exposed to heat or flame.
- Vapour may travel a considerable distance to source of ignition.
- Heating may cause expansion or decomposition leading to violent rupture of containers.
- On combustion, may emit toxic fumes of carbon monoxide (CO)., Combustion products include, carbon dioxide (CO<sub>2</sub>), other pyrolysis products typical of burning organic material.

## FIRE INCOMPATIBILITY

Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.

## HAZCHEM

3[Y]

## Personal Protective Equipment

PERSONAL PROTECTION EQUIPMENT

Gloves, boots (chemical resistant).

Breathing apparatus.

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## Section 6 - ACCIDENTAL RELEASE MEASURES

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## EMERGENCY PROCEDURES

### MINOR SPILLS

- Remove all ignition sources.
- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Control personal contact by using protective equipment.
- Contain and absorb small quantities with vermiculite or other absorbent material.
- Wipe up.
- Collect residues in a flammable waste container.

### MAJOR SPILLS

Chemical Class: aliphatic hydrocarbons

For release onto land: recommended sorbents listed in order of priority.

SORBENT TYPE RANK APPLICATION COLLECTION LIMITATIONS

LAND SPILL - SMALL

cross-linked polymer - particulate	1	shovel	shovel	R, W, SS
cross-linked polymer - pillow	1	throw	pitchfork	R, DGC, RT
wood fiber -	2	throw	pitchfork	R, P, DGC, RT

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## Section 6 - ACCIDENTAL RELEASE MEASURES

pillow  
treated wood 2 throw pitchfork DGC, RT  
fibre- pillow  
sorbent clay - 3 shovel shovel R, I, P  
particulate  
foamed glass - 3 throw pitchfork R, P, DGC, RT  
pillow

### LAND SPILL - MEDIUM

cross-linked 1 blower skiploader R,W, SS  
polymer -  
particulate  
cross-linked 2 throw skiploader R, DGC, RT  
polymer -  
pillow  
sorbent clay - 3 blower skiploader R, I, P  
particulate  
polypropylene 3 blower skiploader W, SS, DGC  
- particulate  
expanded 4 blower skiploader R, I, W, P,  
mineral - DGC  
particulate  
polypropylene 4 throw skiploader DGC, RT  
- mat

### Legend

DGC: Not effective where ground cover is dense  
R; Not reusable  
I: Not incinerable  
P: Effectiveness reduced when rainy  
RT: Not effective where terrain is rugged  
SS: Not for use within environmentally sensitive sites  
W: Effectiveness reduced when windy

Reference: Sorbents for Liquid Hazardous Substance Cleanup and Control;  
R.W Melvold et al: Pollution Technology Review No. 150: Noyes Data Corporation  
1988.

- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- May be violently or explosively reactive.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water course.
- No smoking, naked lights or ignition sources.
- Increase ventilation.
- Stop leak if safe to do so.
- Water spray or fog may be used to disperse / absorb vapour.
- Contain spill with sand, earth or vermiculite.
- Use only spark-free shovels and explosion proof equipment.
- Collect recoverable product into labelled containers for recycling.
- Absorb remaining product with sand, earth or vermiculite.
- Collect solid residues and seal in labelled drums for disposal.
- Wash area and prevent runoff into drains.
- If contamination of drains or waterways occurs, advise emergency services.

### EMERGENCY EXPOSURE LIMITS

Material	Revised IDLH Value (ppm)	Revised IDLH Value (mg/m3)
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## Section 6 - ACCIDENTAL RELEASE MEASURES

other than mild, transient adverse effects  
without perceiving a clearly defined odour is:  
1,2-dichloropropane 110 ppm

The threshold concentration below which most people  
will experience no appreciable risk of health effects:  
1,2-dichloropropane 75 ppm

American Industrial Hygiene Association (AIHA)

Ingredients considered according exceed the following cutoffs

Very Toxic (T+) >= 0.1%	Toxic (T)	>= 3.0%
R50 >= 0.25%	Corrosive (C)	>= 5.0%
R51 >= 2.5%		
else >= 10%		

where percentage is percentage of ingredient found in the mixture

**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 overexposure occurs.
  - Use in a well-ventilated area.
  - Prevent concentration in hollows and sumps.
  - DO NOT enter confined spaces until atmosphere has been checked.
  - Avoid smoking, naked lights or ignition sources.
  - Avoid generation of static electricity.
  - DO NOT use plastic buckets.
  - Earth all lines and equipment.
  - Use spark-free tools when handling.
  - Avoid contact with incompatible materials.
  - When handling, DO NOT eat, drink or smoke.
  - Keep containers securely sealed when not in use.
  - Avoid physical damage to containers.
  - Always wash hands with soap and water after handling.
  - Work clothes should be laundered separately.
  - Use good occupational work practice.
  - Observe manufacturer's storing and handling recommendations.
  - Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions.
- DO NOT allow clothing wet with material to stay in contact with skin.

### SUITABLE CONTAINER

Packing as supplied by manufacturer. Plastic containers may only be used if approved for flammable liquid. Check that containers are clearly labelled and free from leaks.

- For low viscosity materials (i) : Drums and jerry cans must be of the non-removable head type. (ii) : Where a can is to be used as an inner package, the can must have a screwed enclosure.
- For materials with a viscosity of at least 2680 cSt. (23 deg. C)
- For manufactured product having a viscosity of at least 250 cSt. (23 deg. C)
- Manufactured product that requires stirring before use and having a viscosity of at least 20 cSt (25 deg. C)
  - (i) : Removable head packaging;
  - (ii) : Cans with friction closures and
  - (iii) : low pressure tubes and cartridges may be used.

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Section 7 - HANDLING AND STORAGE

- Where combination packages are used, and the inner packages are of glass, there must be sufficient inert cushioning material in contact with inner and outer packages
- In addition, where inner packagings are glass and contain liquids of packing group I there must be sufficient inert absorbent to absorb any spillage, unless the outer packaging is a close fitting moulded plastic box and the substances are not incompatible with the plastic.

## STORAGE INCOMPATIBILITY

Avoid reaction with oxidising agents.

## STORAGE REQUIREMENTS

- Store in original containers in approved flammable liquid storage area.
- DO NOT store in pits, depressions, basements or areas where vapours may be trapped.
- No smoking, naked lights, heat or ignition sources.
- Keep containers securely sealed.
- Store away from incompatible materials in a cool, dry, well-ventilated area.
- Protect containers against physical damage and check regularly for leaks.
- Observe manufacturer's storing and handling recommendations.

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## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

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### EXPOSURE CONTROLS

Source	Material	TWA ppm	TWA mg/m <sup>3</sup>	STEL ppm	STEL mg/m <sup>3</sup>	Peak ppm	Peak mg/m <sup>3</sup>
Australian Exposure Standards	White spirits		790				
Australian Exposure Standards	Propylene dichloride	75	347	110	508		

No data available for white spirit as (CAS: 8042-47-5)  
None assigned. Refer to individual constituents.

### ODOUR SAFETY FACTOR (OSF)

OSF=0.042 (white spirit)

Exposed individuals are NOT reasonably expected to be warned, by smell, that the Exposure Standard is being exceeded.

Odour Safety Factor (OSF) is determined to fall into either Class C, D or E.

The Odour Safety Factor (OSF) is defined as:

OSF= Exposure Standard (TWA) ppm/ Odour Threshold Value (OTV) ppm

Classification into classes follows:

Class	OSF	Description
A	550	Over 90% of exposed individuals are aware by smell that the Exposure Standard (TLV-TWA for example) is being reached, even when distracted by working activities
B	26-550	As "A" for 50-90% of persons being distracted
C	1-26	As "A" for less than 50% of persons being distracted
D	0.18-1	10-50% of persons aware

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## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

E	<0.18	of being tested perceive by smell that the Exposure Standard is being reached As "D" for less than 10% of persons aware of being tested
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### INGREDIENT DATA

#### WHITE SPIRIT:

Low and high odour thresholds of 5.25 and 157.5 mg/m<sup>3</sup>, respectively, were considered to provide a rather useful index of odour as a warning property. The TLV-TWA is calculated from data on the toxicities of the major ingredients and is intended to minimise the potential for irritative and narcotic effects, polyneuropathy and kidney damage produced by vapours. The NIOSH (USA) REL-TWA of 60 ppm is the same for all refined petroleum solvents. NIOSH published an occupational "action level" of 350 mg/m<sup>3</sup> for exposure to Stoddard solvent, assuming a 10-hour work shift and a 40-hour work-week. The NIOSH-REL ceiling of 1800 mg/m<sup>3</sup> was established to protect workers from short-term effects that might produce vertigo or other adverse effects which might increase the risk of occupational accidents. Combined (gross) percutaneous absorption and inhalation exposure (at concentrations associated with nausea) are thought, by some, to be responsible for the development of frank hepatic toxicity and jaundice.

#### 1,2-DICHLOROPROPANE:

High concentrations of 1,2-dichloropropane produce ocular and upper respiratory tract irritation, central nervous system depression and hepatic and renal injury. The TLV-TWA for hepatotoxic halogenated compounds has generally been substantially reduced from 75 ppm and this value may be the subject of review in this case.

### PERSONAL PROTECTION

#### 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 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].

#### HANDS/FEET

Wear chemical protective gloves, eg. PVC.  
Wear safety footwear or safety gumboots, eg. Rubber.

#### OTHER

- Overalls.
- PVC Apron.
- PVC protective suit may be required if exposure severe.
- Eyewash unit.

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## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

- Ensure there is ready access to a safety shower.

### GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:  
"Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the computer-generated selection: 1,2-dichloropropane

Glove selection is based on a modified presentation of the:  
"Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the computer-generated selection:

Protective Material CPI \*

PVA	A
VITON	A
TEFLON	A

Glove selection is based on a modified presentation of the:  
"Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the computer-generated selection:

Protective Material CPI \*.

\* CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

NOTE: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -

\* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

### RESPIRATOR

Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant.

Protection Factors (defined as the ratio of contaminant outside and inside the mask) may also be important.

Breathing Zone Level ppm (volume)	Maximum Protection Factor	Half-face Respirator	Full-Face Respirator
1000	10	A-AUS	-
1000	50	-	A-AUS
5000	50	Airline *	-
5000	100	-	A-2
10000	100	-	A-3
	100+		Airline**

\* - Continuous Flow \*\* - Continuous-flow or positive pressure demand.

The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required.

For further information consult site specific CHEMWATCH data (if available), or your Occupational Health and Safety Advisor.

### ENGINEERING CONTROLS

For flammable liquids and flammable gases, local exhaust ventilation or a process enclosure ventilation system may be required. Ventilation equipment should be explosion-resistant.

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## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.

Type of Contaminant: solvent, vapours, degreasing etc., evaporating from tank (in still air). aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation)	Air Speed: 0.25-0.5 m/s (50-100 f/min.)  0.5-1 m/s (100-200 f/min.)
direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)	1-2.5 m/s (200-500 f/min.)

Within each range the appropriate value depends on:

Lower end of the range	Upper end of the range
1: Room air currents minimal or favourable to capture	1: Disturbing room air currents
2: Contaminants of low toxicity or of nuisance value only.	2: Contaminants of high toxicity
3: Intermittent, low production.	3: High production, heavy use
4: Large hood or large air mass in motion	4: Small hood-local control only

Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min.) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

### APPEARANCE

Colourless flammable liquid with a typical odour: does not mix with water.

### PHYSICAL PROPERTIES

Liquid.  
Does not mix with water.  
Floats on water.

Molecular Weight: Not applicable  
Melting Range (°C): Not applicable  
Solubility in water (g/L): Immiscible  
pH (1% solution): Not applicable  
Volatile Component (%vol): >55

Boiling Range (°C): 138  
Specific Gravity (water=1): 0.83  
pH (as supplied): Not applicable  
Vapour Pressure (kPa): 7 @23C  
Evaporation Rate: Not available

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## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Relative Vapour Density (air=1): 3.6  
Lower Explosive Limit (%): Not available  
Autoignition Temp (°C): 400  
State: Liquid

Flash Point (°C): 27  
Upper Explosive Limit (%): Not available  
Decomposition Temp (°C):

## Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

### CONDITIONS CONTRIBUTING TO INSTABILITY

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

## Section 11 - TOXICOLOGICAL INFORMATION

### POTENTIAL HEALTH EFFECTS

#### ACUTE HEALTH EFFECTS

##### SWALLOWED

Accidental ingestion of the material may be damaging to the health of the individual.

Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result. (ICSC13733).

Central nervous system (CNS) depression may include general discomfort, symptoms of giddiness, headache, dizziness, nausea, anaesthetic effects, slowed reaction time, slurred speech and may progress to unconsciousness. Serious poisonings may result in respiratory depression and may be fatal.

Ingestion of petroleum hydrocarbons can irritate the pharynx, oesophagus, stomach and small intestine, and cause swellings and ulcers of the mucous.

Symptoms include a burning mouth and throat; larger amounts can cause nausea and vomiting, narcosis, weakness, dizziness, slow and shallow breathing, abdominal swelling, unconsciousness and convulsions. Damage to the heart muscle can produce heart beat irregularities, ventricular fibrillation (fatal) and ECG changes. The central nervous system can be depressed. Light species can cause a sharp tingling of the tongue and cause loss of sensation there. Aspiration can cause cough, gagging, pneumonia with swelling and bleeding.

##### EYE

There is some evidence to suggest that this material can cause eye irritation and damage in some persons.

Direct eye contact with petroleum hydrocarbons can be painful, and the corneal epithelium may be temporarily damaged. Aromatic species can cause irritation and excessive tear secretion.

The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

##### SKIN

This material can cause inflammation of the skin on contact in some persons.

The material may accentuate any pre-existing dermatitis condition.

Skin contact is not thought to have harmful health effects (as classified under EC Directives); the material may still produce health damage following entry through wounds, lesions or abrasions.

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

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Section 11 - TOXICOLOGICAL INFORMATION

use of the material and ensure that any external damage is suitably protected. Aromatic hydrocarbons may produce sensitivity and redness of the skin. They are not likely to be absorbed into the body through the skin but branched species are more likely to.

## INHALED

Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual.

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.

Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by narcosis, drowsiness, reduced alertness, loss of reflexes, lack of coordination and vertigo.

If exposure to highly concentrated solvent atmosphere is prolonged this may lead to narcosis, unconsciousness, even coma and possible death.

Inhalation exposure may cause susceptible individuals to show change in heart beat rhythm i.e. cardiac arrhythmia. Exposures must be terminated.

Acute intoxication by halogenated aliphatic hydrocarbons appears to take place over two stages. Signs of a reversible narcosis are evident in the first stage and in the second stage signs of injury to organs may become evident, a single organ alone is (almost) never involved.

## CHRONIC HEALTH EFFECTS

Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. There has been concern that this material can cause cancer or mutations, but there is not enough data to make an assessment. Chronic solvent inhalation exposures may result in nervous system impairment and liver and blood changes. [PATTYS]. Constant or exposure over long periods to mixed hydrocarbons may produce stupor with dizziness, weakness and visual disturbance, weight loss and anaemia, and reduced liver and kidney function. Skin exposure may result in drying and cracking and redness of the skin. Chronic exposure to lighter hydrocarbons can cause nerve damage, peripheral neuropathy, bone marrow dysfunction and psychiatric disorders as well as damage the liver and kidneys. The material may accumulate in the human body and progressively cause tissue damage.

## TOXICITY AND IRRITATION

### TOXICITY

Oral (rat) LD50: >5000 mg/kg  
Dermal (rabbit) LD50: >2000 mg/kg

### IRRITATION

[Fernz]

### WHITE SPIRIT:

#### TOXICITY

Inhalation (human) TCl<sub>0</sub>: 600 mg/m<sup>3</sup>/8h  
white spirit, as CAS RN 8052-41-3  
Oral (rat) LD50: >5000 mg/kg  
Inhalation (rat) LC50: >5500 mg/m<sup>3</sup>/4h

#### IRRITATION

Nil Reported

Eye (human): 470 ppm/15m  
Eye (rabbit): 500 mg/24h moderate

### 1,2-DICHLOROPROPANE:

#### TOXICITY

Oral (rat) LD50: 1947 mg/kg  
Oral (rat) LD50: 2204 mg/kg \*  
Inhalation (rat) LC50: 14000 mg/m<sup>3</sup>/8h  
Oral (mouse) LD50: 860 mg/kg  
Inhalation (mouse) LC50: 480 ppm/10h\*  
Dermal (rabbit) LD50: 8750 mg/kg  
Oral (guinea) pig: LD50 2000 mg/kg

#### IRRITATION

Eye (rabbit): 500 mg - Mild

\* Dow Chemical

continued...



# MAPEI KERASEAL

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## Section 14 - TRANSPORTATION INFORMATION

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Shipping Name:  
PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)  
Dangerous Goods Class: 3  
Subrisk: None  
UN/NA Number: 1263  
Packing Group: III  
Labels Required: flammable liquid  
Additional Shipping Information:  
International Transport Regulations:  
IMO Dangerous Goods class: 3  
IMO Packing group: None  
IATA Dangerous goods class: 3  
Cargo Instructions: 310  
Cargo Max: 220 L  
Passenger Instructions: 309  
Passenger Max: 60 L  
Special Provisions: A72, None

## HAZCHEM

3[Y]

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## Section 15 - REGULATORY INFORMATION

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### POISONS SCHEDULE

S5

### REGULATIONS

white spirit (CAS: 8052-41-3) is found on the following regulatory lists:  
Australian Inventory of Chemical Substances (AICS)  
Australian Poisons Schedule  
white spirit (CAS: 8042-47-5) is found on the following regulatory lists:  
Australian Inventory of Chemical Substances (AICS)  
Australia High Volume Industrial Chemical List (HVICL)

1,2-dichloropropane (CAS: 78-87-5) is found on the following regulatory lists:  
Australian Inventory of Chemical Substances (AICS)  
Australian Poisons Schedule

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## Section 16 - OTHER INFORMATION

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