

MATERIAL SAFETY DATA SHEET

Section 1: Identification

Product name: Precast Mould Cleaner
Recommended use: As a non-flammable silicone remover for steel moulds
Company details: Rockbond SCP Ltd
Address: 7 Te Puni Street, Petone, Lower Hutt, Wellington, New Zealand 5012
Telephone Number: 0800 76 25 26
Emergency telephone number: 0800 76 25 26 (Hours of Operation 7.30am to 5pm Monday - Friday)
Date of preparation: May 2024

Section 2: Hazards Identification

Hazard classification: This product is classified as hazardous under HSNO criteria

HSNO Approval Number: HSR002655

Hazardous Classification(s)

6.1D (inhalation), 6.3A, 6.4A, 6.6B, 6.7A, 6.9B (inhalation), 9.1D (fish), 9.1D (crustacean), 9.1D (algal)

GHS Pictogram(s):



Signal word: DANGER

Hazard Statements Harmful if inhaled.

Causes skin irritation.

Causes serious eye irritation.

Suspected of causing genetic defects.

May cause cancer.

May cause damage to organs through prolonged or repeated inhalation exposure.

May cause long lasting harmful effects to aquatic life.

Prevention: Keep out of reach of children.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breathe vapours

Use personal protective equipment as required and wear protective gloves and eye/face protection. Use only outdoors or in a well-ventilated area.

Wash thoroughly after handling.

Avoid release to the environment

Response: IF exposed or concerned: Get medical advice/ attention. Get medical advice/attention if you feel unwell.

IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/ attention. Take off contaminated clothing and wash before re-use.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Storage: Store locked up

Disposal: Dispose of substance and packaging through a licensed waste contractor and in accordance with the Hazardous Substances (Disposal) Regulations 2001 and local bylaws.

Dangerous Goods Classification 6.1

Packing Group III

Hazchem Code 2Z

Section 3: Composition/information on ingredients

Substance Based on Trichloroethylene

CAS number: 79-01-6

Product Code: RB 7.30

Dangerous Goods Classification 6.1

Packing Group III

Hazchem Code 2Z

Chemical Ingredient

Trichloroethylene

CAS Number

79-01-6

Proportion (% w/w)

>75

Section 4: First-aid measures

For advice, contact the National Poisons Centre (Phone New Zealand: 0800 764 766) or a doctor.

Ingestion

If swallowed, do not induce vomiting unless directed to do so by medical personnel. Give a glass of water. Begin artificial respiration if the victim is not breathing. Use mouth to nose rather than mouth to mouth. Obtain medical attention.

Skin Contact

If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. For advice, contact the National Poisons Centre (0800 746 766) or a doctor immediately.

Eye Contact

Hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the National Poisons Centre, or for at least 15 minutes.

Inhalation

Move the victim to fresh air immediately. Begin artificial respiration if breathing has stopped.

First Aid facilities

Provide eye baths and safety showers close to areas where splashing may occur.

Medical Attention

Do not administer adrenaline or epinephrine to a victim of chlorinated solvent poisoning. Treat according to symptoms. Gastric lavage may be indicated if ingested. Do not wait for symptoms to develop. General measures should be taken to control acidosis and maintain urine output.

Section 5: Fire-fighting measures

Shut off product that may 'fuel' a fire if safe to do so. Allow trained personnel to attend a fire in progress, providing fire fighters with this Safety Data Sheet. Prevent extinguishing media from escaping to drains and waterways.

Suitable extinguishing media

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam

Hazards from combustion products

Carbon dioxide and carbon monoxide, hydrogen chloride gas, phosgene, other compounds of chlorine.

Precautions for fire fighters and special protective equipment

Full protective clothing and self-contained breathing apparatus

Section 6: Accidental release measures

Emergency Procedures

Prevent product from escaping to drains and waterways. Contain leaking packaging in a containment vessel. Prevent any vapours or dust from building up in confined areas. Ensure that drain valves are closed at all times. Ensure adequate ventilation. Clean up and report spills immediately.

Methods and materials for containment

Major Land Spill

- Eliminate sources of ignition.
- Warn occupants of downwind areas of possible hazards.
- Prevent product from entering sewers, watercourses, or low-lying areas.
- Keep the public away from the area.
- Shut off the source of the spill if safe to do so.
- Advise authorities if substance has entered a watercourse or sewer or has contaminated soil or vegetation.
- Take measures to minimise the effect on the groundwater.
- Contain the spilled product.
- Recover product by containing and collecting methods. For liquids: use a flame-proof pump or hand pump – or collect with suitable absorbent material (e.g. sand, diatomite, acid binders, universal binders, sawdust) .
- Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.
- See "First Aid Measures" and "Stability and Reactivity".

Major Water Spill

- Eliminate any sources of ignition.
- Warn occupants and shipping in downwind areas of possible hazards.
- Notify the port or relevant authority and keep the public away from the area.
- Shut off the source of the spill if possible and safe to do so.
- Confine the spill if possible.
- Remove the product from the surface by skimming or with suitable absorbent material.
- Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.
- See "First Aid Measures" and "Stability and Reactivity".

Section 7: Handling and storage

Precautions for safe handling

Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. See Section 8 of this SDS for details of personal protective measures, and make sure that those measures are followed.

The measures detailed below under "safe storage" should be followed during handling in order to minimise risks to persons using the product in the workplace.

Conditions for safe storage

Store in tightly closed containers in a cool, dry, ventilated place away from direct sunlight. Protect against physical damage. Isolate from any source of heat or ignition. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (vapours, liquid); observe all warnings and precautions listed for the product.

Incompatible materials

Strong acids, strong bases, strong oxidising agents, metal powders

Section 8: Exposure controls/personal protection

Exposure Standards

New Zealand Workplace Exposure Standards (2016):

The time-weighted average concentration (TWA) for Trichloroethylene is: 269 mg/m³ (50 ppm)

The short-term exposure limit (STEL) is: 1,070 mg/m³ (200 ppm)

Biological Exposure Index (BEI):

<u>Exposure</u>	<u>Determinant</u>	<u>Sampling time</u>	<u>BEI</u>
Trichloroethylene	Trichloroacetic acid in urine	End of work week	100 mg/L

Engineering Controls: Ventilation

The use of local exhaust ventilation is recommended to control process emissions near the source. Laboratory samples should be handled in a fume hood. Provide mechanical ventilation of confined spaces. Use explosion-proof ventilation equipment.

Personal Protective Equipment

Respiratory Protection: Where concentrations in air may exceed the limits described in the National Exposure Standards, it is recommended to use a half-face filter mask to protect from overexposure by inhalation. A type "A" filter material is considered suitable for this product.

Eye protection: Always use safety glasses or a face shield when handling this product.

Skin/ Body Protection: Always wear long sleeves and long trousers or coveralls, and enclosed footwear of safety boots when handling this product. It is recommended that chemical resistant gloves be worn when handling this product.

General Protective and Hygiene Measures

Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Store protective clothing separately. Avoid contact with the eyes and skin.

Section 9: Physical and chemical properties

Property	Unit of measurement	Typical value
Appearance	None	Colourless flued
Odour	None	Chlorine-like
Melting Point	°C	-86.4
Boiling Point	°C	87
Flash Point	°C	Not applicable
Density @ 20°C	g/ml; kg/m3	1.464
Vapour Pressure @ 20°C	hPa	77
Vapour Density @ 20°C	g/ml; kg/m3	4.5
Ignition Temperature	°C	410
Autoignition Temperature	°C	Not determined
Explosive Limits in Air	% vol/vol	Lower: 7.9 Upper: 90
Viscosity @ 20°C	cPs	Not determined
VOC content	% vol/vol	100
Alkalinity/ acidity as pH	None	Not determined
Solubility in water @ 20°C	g/L	1

The values listed are indicative of this product's physical and chemical properties. For a full product specification, please consult the Technical Data Sheet

Section 10: Stability and reactivity

Chemical stability

Stable at room temperature and pressure

Conditions to avoid

Exposure to heat or sources of ignition. Contact with incompatible materials

Hazardous decomposition products

Trichloroethylene decomposes on contact with strong alkali producing dichloroacetylene, which increases fire hazard. See "Fire Fighting Measures".

Hazardous reactions

Trichloroethylene reacts violently with metal powders such as magnesium, aluminium, titanium and barium

Hazardous Polymerisation

Will not occur

Section 11: Toxicological information

Acute Effects

Ingestion

No specific information available

Eye Contact

This product causes serious eye irritation

Skin Contact

This product is irritating to skin and mucous membranes.

No sensitising effects are known

Inhalation

This product is harmful if inhaled.

Chronic Effects

Suspected of causing genetic defects

May cause cancer

Carcinogenicity categories

IARC Category 2A

Probably Carcinogenic to Humans

NTP R

Reasonably anticipated to be human carcinogens

Other Health Effects Information

None

Toxicological Information

LD50 (oral, mouse): 2402 mg/kg

LD50 (dermal, mouse): 8450 mg/kg

LC50 (Inhalation, rat, gas): 4800 ppm

LOAEL (inhalation, rats, CNS disturbances): 50 ppm

Section 12: Ecological information

Ecotoxicity

Aquatic Toxicity:

Fish toxicity: LC50 (*Imanda limanda*): 16 mg/L

NOEC (*Jordanella floridae*): 5.76 mg/L

Crustacean toxicity : EC50 (*Daphnia Magna*): 7.8 mg/L/48 h

Algal toxicity: EC50: 8-150 mg/L

Persistence/ Biodegradability:

Not readily biodegradable.

Bio accumulative Potential:

Based on its low n-octanol/water partition coefficient and the results of field studies, trichloroethylene is unlikely to bioaccumulate significantly in aquatic biota and piscivorous birds.

Measured bioaccumulation factors ranged from < 3 for muscle tissue of marine and freshwater birds to approximately 100 for fish livers

Mobility:

This product is highly volatile and will rapidly evaporate to the air if released into the water

Section 13: Disposal considerations

Disposal Methods

Empty packaging should be taken for recycling, recovery or disposal through a suitably qualified or licensed contractor. Care should be taken to ensure compliance with national and local authorities. Packaging may still contain product residue that may be harmful. Ensure that empty packaging is managed in accordance with Dangerous Goods and HSNO regulations.

Special Precautions

This product is not suitable for disposal by either landfill or via municipal sewers, drains, natural streams or rivers. In the absence of a designated industrial incinerator, this product should be treated and disposed through chemical waste treatment, or considered for use in solvent recycling

Section 14: Transport information

Road and Rail Transport

UN No	1710
Proper Shipping Name	TRICHLOROETHYLENE
DG Class	6.1
Sub. Risk	None
Pack Group	III

Dangerous Goods Segregation



This product has been classified as Dangerous Goods according to criteria in the New Zealand Standard 5433: Transport of Dangerous Goods on Land

Section 15: Regulatory Information

Country/ Region: New Zealand

Inventory: NZIoC

Status: Listed

HSNO Approval Number: HSR002655: Solvents (Toxic [6.7]) Group Standard 2006

HSNO Classifications: 6.1D (inhalation), 6.3A, 6.4A, 6.6B, 6.7A, 6.9B (inhalation), 9.1D (fish), 9.1D (crustacean), 9.1D (algal)

HSNO Controls:

Approved Handler: Trigger quantity: 10 L

Tracking: Not required

Fire Extinguishers: Not required

Response Plans & Secondary Containment: Trigger quantity 1,000 L Refer to *Site and Storage Conditions for Toxic, Corrosive and Ecotoxic Substances* published by EPA

Signage: Trigger quantity 10,000 L. Refer to *Site and Storage Conditions for Toxic, Corrosive and Ecotoxic Substances* published by EPA

Section 16: Other information

History

Date of issue/Date of revision: 1 May 2025

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Notice to reader

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