

MAGNACIDE 575

1. Identification of the material and supplier

Names

Product name : MAGNACIDE 575
Product code : XC575
ADG : TOXIC LIQUID, ORGANIC, N.O.S. (Tetrakis(hydroxymethyl)phosphonium Salt)
Supplier : Baker Hughes, Australia
5 Walker Street,
Braeside,
Victoria 3195,
Australia

Tel: +613 9580 9004
Fax: +613 9580 6004

Emergency telephone number : CHEMTREC Emergency Telephone Numbers (Australasia Geomarket):
- Australia: (02) 9037 2994
- New Zealand: 9801 0034
- PNG: +(61) 2 9037 2994

- UK: +(44) 870-820-0418
- USA: +(1) 703-527-3887 (CHEMTREC International 24 hour)

Uses

Material uses : Biocide

Chemical Product Category

2. Hazards identification

Classification : Repr. Cat. 2; R61
T; R23
Xn; R22
Xi; R41
R43
N; R50


Risk phrases : R61- May cause harm to the unborn child.
R23- Also toxic by inhalation.
R22- Also harmful if swallowed.
R41- Risk of serious damage to eyes.
R43- May cause sensitisation by skin contact.
R50- Very toxic to aquatic organisms.

Safety phrases : S53- Avoid exposure - obtain special instructions before use.
S24- Avoid contact with skin.
S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S37/39- Wear suitable gloves and eye/face protection.
S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S61- Avoid release to the environment. Refer to special instructions/safety data sheet.

Statement of hazardous/dangerous nature : HAZARDOUS SUBSTANCE. DANGEROUS GOODS.

GHS Classification

2. Hazards identification

Classification of the substance or mixture	: ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 3 SERIOUS EYE DAMAGE - Category 1 SKIN SENSITIZATION - Category 1 TOXIC TO REPRODUCTION (Fertility) - Category 1B TOXIC TO REPRODUCTION (Unborn child) - Category 1B SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 ACUTE AQUATIC HAZARD - Category 1
Hazard pictograms	: 
Signal word	: DANGER
Hazard statements	: Toxic if inhaled. Harmful if swallowed. Causes serious eye damage. May cause an allergic skin reaction. May damage fertility or the unborn child. May cause respiratory irritation. Very toxic to aquatic life.
Precautionary statements	
General	: Not applicable.
Prevention	: Obtain special instructions before use. Wear protective gloves. Wear eye or face protection. Avoid release to the environment.
Response	: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Immediately call a POISON CENTER or physician.
Storage	: Store locked up.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
Other hazards which do not result in classification	: None known.

3. Composition/information on ingredients

Ingredient name	CAS number	Concentration
tetrakis(hydroxymethyl)phosphonium sulphate(2:1)	55566-30-8	60 - 100

Other ingredients, determined not to be hazardous according to Safe Work Australia criteria, and not dangerous according to the ADG Code, make up the product concentration to 100%.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First-aid measures

Inhalation	: Get medical attention immediately. Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.
Ingestion	: Get medical attention immediately. Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

4 . First-aid measures

- Skin contact** : Obtain immediate medical attention after the following First Aid measures have been administered. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 15 minutes. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Eye contact** : Obtain immediate medical attention after the following First Aid measures have been administered. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 15 minutes. Chemical burns must be treated promptly by a physician.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
- Advice to doctor** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5 . Fire-fighting measures

- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : None known.
- Special exposure hazards** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. This material is very toxic to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
sulfur oxides
phosphorus oxides
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- Hazchem code** : 2X

6 . Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
- Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.
- Small spill** : Stop leak if without risk. Move containers from spill area. Dispose of via a licensed waste disposal contractor. Absorb with an inert dry material and place in an appropriate waste disposal container.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and

6 . Accidental release measures

Section 13 for waste disposal.

7 . Handling and storage

Storage : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

8 . Exposure controls/personal protection

Occupational exposure limits

Ingredient name

tetrakis(hydroxymethyl)phosphonium sulphate(2:1)

Exposure limits

ACGIH TLV (United States, 4/2014). Skin sensitizer.
TWA: 2 mg/m³ 8 hours.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Engineering measures : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eyes : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.

Hands : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Respiratory : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Skin : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9 . Physical and chemical properties

Physical state : Liquid.

Colour : Colourless.

Odour : Amine-like. [Slight]

Melting point : <-35°C (<-31°F)

Relative density : 1.355 to 1.425 (16°C)

pH : 4.2

Viscosity : Kinematic (40°C (104°F)): 0.1 to 0.21 cm²/s (10 to 21 cSt)

Solubility : Soluble in the following materials: cold water.

10 . Stability and reactivity

- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : Avoid exposure - obtain special instructions before use. Avoid release to the environment. Refer to special instructions/safety data sheet.
- Materials to avoid** : Not available.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11 . Toxicological information

Potential acute health effects

- Inhalation** : Toxic by inhalation.
- Ingestion** : Harmful if swallowed.
- Skin contact** : May cause sensitisation by skin contact.
- Eye contact** : Severely irritating to eyes. Risk of serious damage to eyes.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
tetrakis(hydroxymethyl) phosphonium sulphate(2:1)	LC50 Inhalation Vapour	Rat	0.591 mg/l	4 hours
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	248 mg/kg	-
	LD50 Oral	Rat	575 mg/kg	-

- Conclusion/Summary** : Not available.

Potential chronic health effects

Chronic toxicity

- Conclusion/Summary** : Not available.

Irritation/Corrosion

- Conclusion/Summary** : Not available.

Sensitiser

- Conclusion/Summary** : Not available.

Carcinogenicity

- Conclusion/Summary** : Not available.

Mutagenicity

- Conclusion/Summary** : Not available.

Teratogenicity

- Conclusion/Summary** : Not available.

Reproductive toxicity

- Conclusion/Summary** : Not available.

Product name	Carcinogenic effects	Mutagenic effects	Developmental effects	Fertility effects
tetrakis(hydroxymethyl) phosphonium sulphate(2:1)	-	-	Repr. Cat. 2; R61	-

- Chronic effects** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : May cause birth defects.
- Developmental effects** : No known significant effects or critical hazards.

11 . Toxicological information

Fertility effects	: No known significant effects or critical hazards.
Inhalation	: No specific data.
Ingestion	: No specific data.
Skin	: Adverse symptoms may include the following: irritation redness
Eyes	: Adverse symptoms may include the following: pain or irritation watering redness
Target organs	: Contains material which may cause damage to the following organs: liver.

12 . Ecological information

Ecotoxicity : Very toxic to aquatic organisms.

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
tetrakis(hydroxymethyl) phosphonium sulphate(2:1)	Acute EC50 0.2 mg/l	Algae	96 hours
	Acute EC50 15 mg/l Fresh water	Daphnia	48 hours
	Acute LC50 94 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Chronic NOEC 0.032 ppm Marine water	Daphnia - Daphnia magna	21 days

Conclusion/Summary : Not available.

Other ecological information

Persistence/degradability





Conclusion/Summary : Not available.

Other adverse effects : No known significant effects or critical hazards.




13 . Disposal considerations

Methods of disposal : This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

14 . Transport information

Regulation	UN number	Proper shipping name	Classes	PG*	Label	Additional information
ADG	UN2810	TOXIC LIQUID, ORGANIC, N.O.S. (Tetrakis(hydroxymethyl)phosphonium Salt)	6.1	III	 	Hazchem code 2X
ADR	UN2810	TOXIC LIQUID, ORGANIC, N.O.S. (Tetrakis(hydroxymethyl)phosphonium Salt)	6.1	III	 	UK Hazchem: 2X

14 . Transport information

IMDG	UN2810	TOXIC LIQUID, ORGANIC, N.O.S. (Tetrakis(hydroxymethyl)phosphonium Salt)	6.1	III	 	-
IATA	UN2810	TOXIC LIQUID, ORGANIC, N.O.S. (Tetrakis(hydroxymethyl)phosphonium Salt)	6.1	III		-

PG* : Packing group

15 . Regulatory information

Standard Uniform Schedule of Medicine and Poisons

Not regulated.

Control of Scheduled Carcinogenic Substances

Australia inventory (AICS) : All components are listed or exempted.

EU Classification : Repr. Cat. 2; R61
T; R23
Xn; R22
Xi; R41
R43
N; R50

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National regulations : **National Code of Practice for the Control of Workplace Hazardous Substances. National Code of Practice for the Labelling of Workplace Substances. National Code of Practice for the Preparation of Material Safety Data Sheets. Approved Criteria for Classifying Hazardous Substances.**

16 . Other information

Date of printing : 12 May 2016.

Date of issue/ Date of revision : 12 May 2016

Date of previous issue : 9 May 2016

Version : 1.01

Indicates information that has changed from previously issued version.

Disclaimer

16 . Other information

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.