

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: KATHON WT BIOCIDE

Recommended Use of the Chemical Biocidal product. and Restrictions on Use

Supplier: Ixom Operations Pty Ltd

ABN: 51 600 546 512

Street Address: Level 8, 1 Nicholson Street

East Melbourne Victoria 3002

Australia

Telephone Number: +61 3 9906 3000

Emergency Telephone: 1 800 033 111 (ALL HOURS)

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

2. HAZARDS IDENTIFICATION

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

This material is hazardous according to Safe Work Australia; HAZARDOUS CHEMICAL.

Classification of the chemical:

Acute Oral Toxicity - Category 4
Acute Dermal Toxicity - Category 4
Acute Inhalation Toxicity - Category 4
Skin Corrosion - Sub-category 1C
Eye Damage - Category 1
Skin Sensitisation - Category 1

The following health/environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations:

Acute Aquatic Toxicity - Category 1 Chronic Aquatic Toxicity - Category 1

SIGNAL WORD: DANGER





Hazard Statement(s):

H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

Precautionary Statement(s):

Prevention:

P260 Do not breathe mist, vapours, spray.

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves / protective clothing / eye protection / face protection.

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Response:

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P321 Specific treatment (see First Aid Measures on Safety Data Sheet).

P322 Specific measures (see First Aid Measures on Safety Data Sheet).

P363 Wash contaminated clothing before re-use.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P310 Immediately call a POISON CENTER or doctor/physician.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P304+P312 IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P405 Store locked up.

Disposal:

P501 Dispose of contents and container in accordance with local, regional, national, international regulations.

Poisons Schedule (SUSMP): None allocated.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion	Hazard Codes
Magnesium nitrate	10377-60-3	10-<30%	H272
5-chloro-2-methyl-4-isothiazolin-3-one	26172-55-4	10-<30% (together with 2682-20-4)	H301 H311 H331 H314 H317 H410
2-Methyl-4-isothiazolin-3-one	2682-20-4	10-<30% (together with 26172-55-4)	H301 H311 H314 H317 H335 H400
Non hazardous component(s)	-	to 100%	-

4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor.

Inhalation:

Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If patient finds breathing difficult and develops a bluish discolouration of the skin (which suggests a lack of oxygen in the blood - cyanosis), ensure airways are clear of any obstruction and have a qualified person give oxygen through a face mask. Apply artificial respiration if patient is not breathing. Seek immediate medical advice.

Skin Contact:

If spilt on large areas of skin or hair, immediately drench with running water and remove clothing. Continue to wash skin and hair with plenty of water (and soap if material is insoluble) until advised to stop by the Poisons Information Centre or a doctor.

Eye Contact:

Immediately wash in and around the eye area with large amounts of water for at least 15 minutes. Eyelids to be held apart. Remove clothing if contaminated and wash skin. Urgently seek medical assistance. Transport promptly to

hospital or medical centre. Product Name: KATHON WT BIOCIDE Issued: 03/12/2015 Substance No: 000000053129



Ingestion:

Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. Never give anything by the mouth to an unconscious patient. Seek immediate medical assistance.

Indication of immediate medical attention and special treatment needed:

Treat symptomatically. Can cause corneal burns. Possible mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock and convulsions may be necessary. May cause methemoglobinemia. Clinical findings: The smooth muscle relaxant effect of nitrate salts may lead to headache, dizziness and marked hypotension.

Cyanosis is clinically detectable when approximately 15% of the haemoglobin has been converted to methaemoglobin (ie. ferric iron).

Symptoms such as headache, dizziness, weakness and dyspnoea occur when methaemoglobin concentrations are 30% to 40%; at levels of about 60%, stupor, convulsions, coma and respiratory paralysis occur and the blood is a chocolate brown colour. At higher levels death may result. Spectrophotometric analysis can determine the presense and concentration of methaemoglobin in blood.

Treatment:

- 1. Give 100% oxygen.
- 2. In cases of (a) ingestion: use gastric lavage, (b) contamination of skin (unburnt or burnt): continue washing to remove salts.
- 3. Observe blood pressure and treat hypotension if necessary.
- 4. When methaemoglobin concentrations exceed 40% or when symptoms are present, give methylene blue 1 to 2 mg/kg body weight in a 1% solution by slow intravenous injection. If cyanosis has not resolved within one hour a second dose of 2 mg/kg body weight may be given. The total dose should not exceed 7 mg/kg body weight as unwanted effects such as dyspnoea, chest pain, vomiting, diarrhoea, mental confusion and cyanosis may occur. Without treatment methaemoglobin levels of 20-30% revert to normal within 3 days.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

Not combustible, however, if material is involved in a fire use: Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).

Hazchem or Emergency Action Code: 2X

Specific hazards arising from the chemical:

Non-combustible material. Corrosive substance.

Special protective equipment and precautions for fire-fighters:

Decomposes on heating emitting toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition.

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures/Environmental precautions:

Clear area of all unprotected personnel. If contamination of sewers or waterways has occurred advise local emergency services.

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Personal precautions/Protective equipment/Methods and materials for containment and cleaning up:

Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact and breathing in vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. Deactivate spill area with freshly prepared solution of 5% sodium bicarbonate and 5% sodium hypochlorite in water. Apply solution to spill area at ratio of 10 volumes deactivation solution per estimated volume of residual spill to deactivate any residual active ingredient. Let stand for 30 min. Flush area with copious amounts of water to chemical sewer, in compliance with applicable regulations.

7. HANDLING AND STORAGE

Precautions for safe handling:

Avoid skin and eye contact and breathing in vapour, mists and aerosols.

Conditions for safe storage, including any incompatibilities:

Store in a cool, dry, well ventilated place. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for leaks.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters: No value assigned for this specific material by Safe Work Australia.

Appropriate engineering controls:

Use in well ventilated areas. Keep containers closed when not in use.

Individual protection measures, such as Personal Protective Equipment (PPE):

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, CHEMICAL GOGGLES, FACE SHIELD, GLOVES (Long), APRON, RUBBER BOOTS.













Wear overalls, chemical goggles, face shield, elbow-length impervious gloves, splash apron or equivalent chemical impervious outer garment, and rubber boots. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

If determined by a risk assessment an inhalation risk exists, wear a suitable mist respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid

Colour: Pale Yellow to Amber

Odour: Pungent

Solubility: Miscible with water.

Specific Gravity: 1.300
Relative Vapour Density (air=1): ca. 0.620
Vapour Pressure (20 °C): Not available

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Flash Point (°C):

Flammability Limits (%):

Autoignition Temperature (°C):

Boiling Point/Range (°C):

pH:

Not applicable

Not applicable

100 (water)

1.0-3.0

Viscosity: 16.0 mPa.s @25°C

Freezing Point/Range (°C): -33

10. STABILITY AND REACTIVITY

Reactivity: No information available.

Chemical stability: Stable under normal ambient and anticipated storage and handling conditions of

temperature and pressure.

Possibility of hazardous

reactions:

Hazardous polymerisation will not occur.

Conditions to avoid: Avoid contact with foodstuffs.

Incompatible materials: Incompatible with oxidising agents, amines, reducing agents, mercaptans.

Hazardous decomposition

products:

Oxides of nitrogen. Oxides of sulfur. Hydrogen chloride.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Ingestion: Swallowing can result in nausea, vomiting, diarrhoea, abdominal pain and

chemical burns to the gastrointestinal tract.

Eye contact: A severe eye irritant. Corrosive to eyes; contact can cause corneal burns.

Contamination of eyes can result in permanent injury.

Skin contact: Contact with skin will result in severe irritation. Corrosive to skin - may cause skin

burns. A skin sensitiser. Repeated or prolonged skin contact may lead to allergic

contact dermatitis.

Inhalation: Material may be irritant to the mucous membranes of the respiratory tract

(airways).

Acute toxicity:

Oral LD50 (rat): 457 mg/kg Dermal LD50 (rabbit): 660 mg/kg

Respiratory or skin

A skin sensitiser.

sensitisation:

Chronic effects: In vitro mutagenicity studies were negative.

NITRATES: Absorption of nitrates by ingestion, inhalation or through burnt or broken skin may cause dilation of the blood vessels by direct smooth muscle relaxation with a subsequent lowering of blood pressure and may also cause breathing difficulties, blueness of the skin (cyanosis) and methaemoglobinaemia.

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12. ECOLOGICAL INFORMATION

Ecotoxicity Avoid contaminating waterways.

Aquatic toxicity: Very toxic to aquatic organisms. May cause long lasting harmful effects to aquatic

life.

48hr EC50 (Daphnia magna): 0.16 mg/L (Isothiazolone compounds) 96hr LC50 (rainbow trout): 0.19 mg/L (Isothiazolone compounds)

13. DISPOSAL CONSIDERATIONS

Disposal methods:

Refer to Waste Management Authority. Dispose of contents and container in accordance with local, regional, national, international regulations.

14. TRANSPORT INFORMATION

Road and Rail Transport

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.



3265 UN No: **Transport Hazard Class:** 8 Corrosive

Packing Group: Ш

Proper Shipping Name or CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS

Technical Name: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE AND

2-METHYL-4-ISOTHIAZOLIN-3-ONE)

Hazchem or Emergency Action 2X

Code:

Marine Transport

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

UN No: 3265

Transport Hazard Class: 8 Corrosive

Packing Group: Ш

Proper Shipping Name or CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS

5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE AND **Technical Name:**

2-METHYL-4-ISOTHIAZOLIN-3-ONE)

IMDG EMS Fire: F-A **IMDG EMS Spill:** S-B

Air Transport

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.

UN No: 3265

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8 Corrosive **Transport Hazard Class:**

Packing Group: Ш

Proper Shipping Name or CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS

Technical Name: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE AND

2-METHYL-4-ISOTHIAZOLIN-3-ONE)

15. REGULATORY INFORMATION

Classification:

This material is hazardous according to Safe Work Australia; HAZARDOUS CHEMICAL.

Classification of the chemical:

Acute Oral Toxicity - Category 4 Acute Dermal Toxicity - Category 4 Acute Inhalation Toxicity - Category 4 Skin Corrosion - Sub-category 1C Eve Damage - Category 1 Skin Sensitisation - Category 1

The following health/environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations:

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Hazard Statement(s):

H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

Poisons Schedule (SUSMP): None allocated.

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

Supplier Material Safety Data Sheet; 05/2014. KATHON is a trademark.

This safety data sheet has been prepared by Ixom Operations Pty Ltd Toxicology & SDS Services.

Reason(s) for Issue:

First Issue Primary SDS

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Ptv Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their Ixom representative or Ixom Operations Pty Ltd at the contact details on page 1.

Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

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