

SAFETY DATA SHEET

According to Safe Work Australia

Printing date 03.11.2016

Revision: 03.11.2016

1 . IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Name: METHAM SOIL FUMIGANT by TITAN

Other Means of Identification: Mixture

Recommended Use of the Chemical and Restriction on Use: Soil fumigant

Details of Manufacturer or Importer:

Titan Ag Pty Ltd
 15/16 Princes Street
 Newport NSW 2106

Phone Number: 02 9999 6655

Emergency telephone number: 02 9999 6655

2 . HAZARDS IDENTIFICATION

Hazardous Nature:

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition).



corrosion

Skin Corrosion/Irritation 1A H314 Causes severe skin burns and eye damage.

Serious Eye Damage/Irritation 1 H318 Causes serious eye damage.



environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.



Acute Toxicity (Oral) 4 H302 Harmful if swallowed.

Skin Sensitisation 1 H317 May cause an allergic skin reaction.

Signal Word Danger

Hazard Statements

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

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

P273 Avoid release to the environment.

P264 Wash hands thoroughly after handling.

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

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

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- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P310 Immediately call a POISON CENTER/doctor.
- P321 Specific treatment (see on this label).
- P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P363 Wash contaminated clothing before reuse.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
- P391 Collect spillage.
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national regulations.
- Additional Information AUH031** Contact with acids liberates toxic gas.

3 . COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical Characterization: Mixtures**Description:** Mixture of substances listed below with nonhazardous additions.**Hazardous Components:**

137-42-8	metham-sodium	42.3%
	 Skin Corrosion/Irritation 1A, H314;  Aquatic Acute 1, H400;  Aquatic Chronic 1, H410;  Acute Toxicity (Oral) 4, H302;  Skin Sensitisation 1, H317	

4 . FIRST AID MEASURES

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

Skin Contact:

In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention.

Eye Contact:

In case of eye contact, hold eyelids open and rinse with water for at least 15 minutes. Seek immediate medical attention.

Ingestion:

If swallowed, do not induce vomiting. Immediately rinse mouth with water. Give a glass of water. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

Information for Doctor:

In severe cases, symptoms of pulmonary oedema can be delayed up to 48 hours after exposure.

Symptoms Caused by Exposure:

Inhalation: May cause respiratory irritation, headache, increased mucous secretion and burns to nasal membranes which may lead to pulmonary oedema.

Skin Contact: Causes severe skin burns. May cause an allergic skin reaction, skin rash or inflammation.

Eye Contact: Causes eye damage.

Ingestion: Harmful if swallowed. May cause burns and ulceration to the gastrointestinal tract.

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5 . FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

Use fire extinguishing methods suitable to surrounding conditions. Water fog or foam are the preferred media for large fires.

Specific Hazards Arising from the Chemical:

Hazardous combustion products include oxides of carbon, sulphur and nitrogen, other nitrogen compounds, other sulphur compounds, sodium compounds, hydrogen cyanide, water and smoke.

The product is not combustible.

Contact with acids liberates toxic gas. Contact with metals may form flammable hydrogen gas.

Special Protective Equipment and Precautions for Fire Fighters:

When fighting a major fire wear self-contained breathing apparatus and protective equipment.

6 . ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Wear appropriate respiratory protection and protective clothing. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation.

Environmental Precautions:

In the event of a major spill, prevent spillage from entering drains or water courses.

Methods and Materials for Containment and Cleaning Up:

Stop leak if safe to do so and absorb spill with sand, earth, vermiculite or some other absorbent material. Collect the spilled material and place into a suitable container for disposal.

7 . HANDLING AND STORAGE

Precautions for Safe Handling:

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours.

Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

Conditions for Safe Storage:

Store in a cool, dry and well ventilated area out of direct sunlight. Keep in original container, tightly closed when not in use. Keep away from acids, oxidising agents, zinc, tin, aluminium and their alloys and salts of heavy metals.

8 . EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Standards:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Engineering Controls: Ensure adequate ventilation of the working area.

Respiratory Protection:

Use an approved vapour respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapour, inadequate ventilation, development of respiratory tract irritation) and engineering controls are not feasible. See Australian Standards AS/NZS 1715 and 1716 for more information.

Skin Protection:

PVC gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information.

When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered.

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Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

Eye and Face Protection:

Eye and face protectors for protection against splashing materials or liquids. See Australian/New Zealand Standard AS/NZS 1337 for more information.

9 . PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Form:	Liquid
Colour:	Amber to yellow-green
Odour:	Pungent
Odour Threshold:	No information available
pH-Value:	No information available
Melting point/Melting range:	<-5 °C
Initial Boiling Point/Boiling Range:	~100 °C (at 100 kPa)
Flash Point:	Not applicable
Flammability:	Product is not flammable.
Auto-ignition Temperature:	Not applicable
Decomposition Temperature:	No information available
Explosion Limits:	
Lower:	Not applicable
Upper:	Not applicable
Vapour Pressure at 20 °C:	2.37 kPa (water vapour pressure)
Relative Density:	1.209
Vapour Density:	>1
Evaporation Rate:	As for water
Solubility in Water at 20 °C:	720 g/L
Partition Coefficient (n-octanol/water):	No information available
Solvent content:	
% Volatiles by Weight:	39 %

10 . STABILITY AND REACTIVITY

Possibility of Hazardous Reactions: Hazardous polymerisation will not occur.

Chemical Stability: Stable at ambient temperature and under normal conditions of use.

Conditions to Avoid: Direct sunlight.

Incompatible Materials:

Acids, oxidising agents, zinc, tin, aluminium and their alloys and salts of heavy metals.

Hazardous Decomposition Products:

Oxides of carbon, sulphur and nitrogen, other nitrogen compounds, other sulphur compounds, sodium compounds, hydrogen cyanide, water and smoke.

11 . TOXICOLOGICAL INFORMATION

Toxicity:**LD₅₀/LC₅₀ Values Relevant for Classification:****137-42-8 metham-sodium**

Oral	LD ₅₀	1700 - 1800 mg/kg (rat)
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Dermal	LD ₅₀	285 mg/kg (mice)
Inhalation	LC ₅₀ /4 h	1300 mg/kg (rabbit) >4.7 mg/L (rat)

Acute Health Effects**Inhalation:**

May cause respiratory irritation, headache, increased mucous secretion and burns to nasal membranes which may lead to pulmonary oedema.

Skin: Causes severe skin burns. May cause an allergic skin reaction, skin rash or inflammation.

Eye: Causes eye damage.

Ingestion: Harmful if swallowed. May cause burns and ulceration to the gastro intestinal tract.

Skin Corrosion / Irritation: Causes severe skin burns.

Serious Eye Damage / Irritation: Causes serious eye damage.

Respiratory or Skin Sensitisation: May cause an allergic skin reaction.

Germ Cell Mutagenicity: Based on classification principles, the classification criteria are not met.

Carcinogenicity: This product does NOT contain any IARC listed chemicals.

Reproductive Toxicity: Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Single Exposure:

Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Repeated Exposure:

Based on classification principles, the classification criteria are not met.

Aspiration Hazard: Based on classification principles, the classification criteria are not met.

Chronic Health Effects:

Prolonged eye contact or delayed treatment may cause permanent blindness and facial scarring. May cause somnolence, cardiac and respiratory disorders. Repeated exposure may cause allergic reactions.

Existing Conditions Aggravated by Exposure: No information available

Additional toxicological information: No information available

12 . ECOLOGICAL INFORMATION

Ecotoxicity:

Metam-sodium:

LC50 (5-day dietary) >5000 mg/kg japanese quail)

Metam-sodium is non toxic to bees.

Aquatic toxicity:

Very Toxic to aquatic life with long lasting effects.

137-42-8 metham-sodium

LC ₅₀ /96 h	0.079 mg/L (rainbow trout)
	0.39 mg/L (bluegill)
	4.2 mg/L (guppy)

Persistence and Degradability: Metam-sodium is biodegradable.

Bioaccumulative Potential:

No information available

Metam-sodium is not expected to accumulate in soil or water.

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Mobility in Soil: No information available**Other adverse effects:** No information available

13 . DISPOSAL CONSIDERATIONS

Disposal Methods and Containers: Dispose according to applicable local and state government regulations.**Special Precautions for Landfill or Incineration:**

Please consult your state Land Waste Management Authority for more information.

14 . TRANSPORT INFORMATION

UN Number ADG, IMDG, IATA	UN3267
Proper Shipping Name ADG	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (metam-sodium), ENVIRONMENTALLY HAZARDOUS CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (metam-sodium), MARINE POLLUTANT
IMDG	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (metam-sodium)
IATA	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (metam-sodium)
Dangerous Goods Class ADG Class: IMDG Class:	8 (C7) Corrosive substances. 8 Corrosive substances.
Packing Group: ADG, IMDG, IATA	III
Marine pollutant:	Yes Symbol (fish and tree)
EMS Number:	F-A,S-B
Hazchem Code:	2X
Special Provisions:	223, 274
Limited Quantities:	5L
Packagings & IBCs - Packing Instruction:	P001, IBC03, LP01
Packagings & IBCs - Special Packing Provisions:	No information available
Portable Tanks & Bulk Containers - Instructions:	T7
Portable Tanks & Bulk Containers - Special Provisions:	TP1, TP28

15 . REGULATORY INFORMATION

Australian Inventory of Chemical Substances:

137-42-8 | metham-sodium

Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:

Not Scheduled.

16 . OTHER INFORMATION

Date of Preparation or Last Revision: 03.11.2016

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Prepared by: MSDS.COM.AU Pty Ltd

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Abbreviations and acronyms:

ADG: Australian Dangerous Goods

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC₅₀: Lethal concentration, 50 percentLD₅₀: Lethal dose, 50 percent

IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

Acute Toxicity (Oral) 4: Acute toxicity – Category 4

Skin Corrosion/Irritation 1A: Skin corrosion/irritation – Category 1A

Serious Eye Damage/Irritation 1: Serious eye damage/eye irritation – Category 1

Skin Sensitisation 1: Skin sensitisation, Hazard Category 1

Aquatic Acute 1: Hazardous to the aquatic environment, short-term (Acute). Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment, long-term (Chronic). Category 1

Disclaimer

This SDS is prepared in accord with the Safe Work Australia document “Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - December 2011”

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