

# Safety Data Sheet

according to WHS Regulations

Printing date 18.01.2023

Revision: 18.01.2023

## 1 Identification

**Product Name: TITAN METHAM SOIL FUMIGANT**

**Other Means of Identification:** Mixture

**APVMA Approval Number:** 65891

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

**Details of Manufacturer or Importer:**

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

**Phone Number:** 02 9999 6655

**Emergency telephone number:** 02 9999 6655

## 2 Hazard(s) 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 1C      H314 Causes severe skin burns and eye damage.

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



Environment

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



Acute Toxicity (Inhalation) 4      H332 Harmful if inhaled.

Skin Sensitisation 1      H317 May cause an allergic skin reaction.

**Signal Word** Danger

### Hazard Statements

H332 Harmful if inhaled.

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 dusts or mists.

P264 Wash thoroughly after handling.

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

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

P273 Avoid release to the environment.

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

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- P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].  
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 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).  
 P362+P364 Take off contaminated clothing and wash it before reuse.  
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
 P363 Wash contaminated clothing before reuse.  
 P391 Collect spillage.  
 P405 Store locked up.  
 P501 Dispose of contents/container in accordance with local/regional/national regulations.

**Supplementary (non-GHS) hazard statements recognised in Australia**

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:**

CAS: 137-42-8	Metham present as sodium salt (metham-sodium)	30-40%
	 Skin Corrosion/Irritation 1B, H314;  Aquatic Chronic 1, H410;  Acute Toxicity (Oral) 4, H302; Acute Toxicity (Dermal) 4, H312; Acute Toxicity (Inhalation) 4, H332; 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 serious 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, sulfur and nitrogen, other nitrogen compounds, other sulfur compounds, sodium compounds, hydrogen cyanide, water and smoke. Contact with acids liberates toxic gas. Contact with metals may form flammable hydrogen gas.

Product is not flammable.

Containers close to fire should be removed only if safe to do so. Use water spray to cool fire exposed containers.

Prevent run-off from fire fighting entering drains or water courses.

HAZCHEM Code: 2X

**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

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permeation breakthrough time should be considered.

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:**

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

### 10 Stability and Reactivity

**Possibility of Hazardous Reactions:** Hazardous polymerisation will not occur.

**Chemical Stability:** Stable at ambient temperature and under normal conditions of storage and 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, sulfur and nitrogen, other nitrogen compounds, other sulfur compounds, sodium compounds, hydrogen cyanide, water and smoke.

### 11 Toxicological Information

**Toxicity:****LD50/LC50 Values:**

**CAS: 137-42-8 Metham present as sodium salt (metham-sodium)**

Oral	LD50	896 mg/kg (rat)
Dermal	LD50	2,000 mg/kg (rat)
Inhalation	LC50/4 h	2.54 mg/l (rat)

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**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 serious eye damage.

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

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

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

## 12 Ecological Information

**Ecotoxicity:**

Metham-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.

**CAS: 137-42-8 Metham present as sodium salt (metham-sodium)**

EC10/48 h	1-10 mg/l (daphnia magna)
	0.56 mg/l (selenastrum capricornutum)
LC50/96 h	0.1-100 mg/l (fish)

**Persistence and Degradability:** Metham-sodium is biodegradable.

**Bioaccumulative Potential:** Metham-sodium is not expected to accumulate in soil or water.

**Mobility in Soil:** No data available on finished product.

**Other adverse effects:** No further relevant information available.

## 13 Disposal Considerations

**Disposal Methods and Containers:** Dispose according to applicable local and state government regulations.

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**Special Precautions for Landfill or Incineration:**

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

**14 Transport Information**

<b>UN Number</b>	
<b>ADG, IMDG, IATA</b>	UN3267
<b>Proper Shipping Name</b>	
<b>ADG</b>	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Metham-sodium), ENVIRONMENTALLY HAZARDOUS
<b>IMDG, IATA</b>	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Metham-sodium)
<b>Dangerous Goods Class</b>	
<b>ADG Class:</b>	8
<b>Packing Group:</b>	
<b>ADG, IMDG, IATA</b>	III
<b>Marine pollutant:</b>	Yes
<b>EMS Number:</b>	F-A,S-B
<b>Hazchem Code:</b>	2X
<b>Special Provisions:</b>	223, 274
<b>Excepted quantities (EQ):</b>	E1
<b>Limited Quantities:</b>	5L
<b>Packagings &amp; IBCs - Packing Instruction:</b>	P001, IBC03, LP01
<b>Packagings &amp; IBCs - Special Packing Provisions:</b>	None
<b>Portable Tanks &amp; Bulk Containers - Instructions:</b>	T7
<b>Portable Tanks &amp; Bulk Containers - Special Provisions:</b>	TP1, TP28

**15 Regulatory Information****Australian Inventory of Industrial Chemicals:**

All ingredients are listed.

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

Poisons Schedule: 6

**Australian Pesticides and Veterinary Medicines Authority:**

This product is registered with the Australian Pesticides and Veterinary Medicines Authority. APVMA approval number 65891.

**16 Other Information****Date of Preparation or Last Revision:** 18.01.2023**Prepared by:** MSDS.COM.AU Pty Ltd[www.msds.com.au](http://www.msds.com.au)**Reasons for alterations:** Transport information update**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 percent

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LD50: 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 1B: Skin corrosion/irritation – Category 1B

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

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

Skin Sensitisation 1: Skin sensitisation, Hazard 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 - July 2020”.

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