

# Safety Data Sheet

according to WHS Regulations

Printing date 02.12.2021

Revision: 02.12.2021

## 1 Identification

**Product Name: TITAN METOLACHLOR 960 HERBICIDE**

**Other Means of Identification:** Mixture

**APVMA Approval Number:** 62514

**Recommended Use of the Chemical and Restriction on Use:** Agricultural herbicide

**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 Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition), IATA and IMDG/IMSBC.

Not subject to the ADG Code when transported in Australia by Road or Rail in packagings that do not incorporate a receptacle exceeding 500(L) or less; or IBCs (refer to SP AU01). However if transported by Air or Sea, this provision does not apply.

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



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** Warning

**Hazard Statements**

H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.

H410 Very toxic to aquatic life with long lasting effects.

**Precautionary Statements**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash 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.

P273 Avoid release to the environment.

P280 Wear protective gloves.

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

P330 Rinse mouth.

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

P362+P364 Take off contaminated clothing and wash it before reuse.

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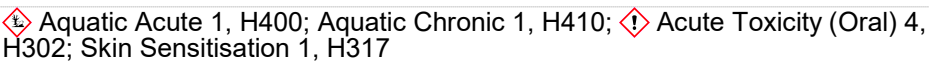
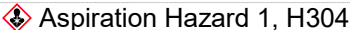
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
 P321 Specific treatment (see on this label).  
 P391 Collect spillage.  
 P501 Dispose of contents/container in accordance with local/regional/national regulations.

### 3 Composition and Information on Ingredients

#### Chemical Characterization: Mixtures

**Description:** Mixture of substances listed below with nonhazardous additions.

#### Hazardous Components:

|                 |   |        |
|-----------------|---|--------|
| CAS: 87392-12-9 | S-metolachlor<br>                           | 90-95% |
| CAS: 64742-94-5 | Solvent naphtha (petroleum), heavy arom.<br> | <10.0% |

### 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 if symptoms occur.

#### 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. Do not give anything by mouth to an unconscious person. Seek immediate medical attention.

#### Symptoms Caused by Exposure:

Inhalation: May cause mild respiratory irritation.

Skin Contact: May cause mild skin irritation.

Eye Contact: May cause mild eye irritation.

Ingestion: Harmful if swallowed. May cause irritation, reddening and burning sensation to mouth and throat, abdominal cramps, anaemia, shortness of breath, dark urine, convulsions, jaundice, diarrhoea, weakness, nausea, sweating and dizziness.

### 5 Fire Fighting Measures

**Suitable Extinguishing Media:** Water fog, foam, dry chemical or carbon dioxide.

#### Specific Hazards Arising from the Chemical:

Hazardous combustion products include oxides of carbon, nitrogen, nitrogen oxides, other nitrogen compounds, hydrogen cyanide, hydrogen chloride, other chlorine compounds and smoke.

Product is combustible.

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: •3Z

#### Special Protective Equipment and Precautions for Fire Fighters:

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

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### 6 Accidental Release Measures

**Personal Precautions, Protective Equipment and Emergency Procedures:**

Wear approved respiratory protection, chemical resistant gloves, protective clothing and safety boots. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation. Extinguish all sources of ignition. Avoid sparks and open flames. No smoking.

**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. Wash spill area, preventing runoff from entering drains.

### 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. Keep in original container, tightly closed when not in use. Protect from heat, sparks, open flames, hot surfaces and direct sunlight. Keep away from strong oxidising agents.

### 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 or rubber 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.

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

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|   |                          |
|---|--------------------------|
| <b>Colour:</b>                                  | Clear yellow to brown    |
| <b>Odour:</b>                                   | Weak, characteristic     |
| <b>Odour Threshold:</b>                         | No information available |
| <b>pH-Value:</b>                                | 4-8 (1% in water)        |
| <b>Melting point/freezing point:</b>            | No information available |
| <b>Initial Boiling Point/Boiling Range:</b>     | No information available |
| <b>Flash Point:</b>                             | 120 °C                   |
| <b>Flammability:</b>                            | Product is combustible   |
| <b>Auto-ignition Temperature:</b>               | 430 °C                   |
| <b>Decomposition Temperature:</b>               | No information available |
| <b>Explosion Limits:</b>                        |                          |
| <b>Lower:</b>                                   | No information available |
| <b>Upper:</b>                                   | No information available |
| <b>Vapour Pressure:</b>                         | No information available |
| <b>Relative Density:</b>                        | 1.085- 1.125             |
| <b>Vapour Density:</b>                          | No information available |
| <b>Evaporation Rate:</b>                        | No information available |
| <b>Solubility in Water:</b>                     | Miscible                 |
| <b>Partition Coefficient (n-octanol/water):</b> | No information available |
| <b>Viscosity at 20 °C:</b>                      | 110.7 mPa.s              |

## 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:** Heat, sparks, open flames, hot surfaces and direct sunlight.

**Incompatible Materials:** Strong oxidising agents.

**Hazardous Decomposition Products:**

Oxides of carbon, nitrogen, nitrogen oxides, other nitrogen compounds, hydrogen cyanide, hydrogen chloride, other chlorine compounds and smoke.

## 11 Toxicological Information

**Toxicity:**

**LD50/LC50 Values:**

**CAS: 87392-12-9 S-metolachlor**

|      |      |                         |
|------|------|-------------------------|
| Oral | LD50 | 1,200-2,780 mg/kg (rat) |
|------|------|-------------------------|

|        |      |                    |
|--------|------|--------------------|
| Dermal | LD50 | >2,000 mg/kg (rat) |
|--------|------|--------------------|

**CAS: 64742-94-5 Solvent naphtha (petroleum), heavy arom.**

|      |      |                   |
|------|------|-------------------|
| Oral | LD50 | 5,000 mg/kg (rat) |
|------|------|-------------------|

|  |      |                      |
|--|------|----------------------|
|  | LD50 | 2,000 mg/kg (rabbit) |
|--|------|----------------------|

**Acute Health Effects**

**Inhalation:** May cause mild irritation.

**Skin:** May cause mild skin irritation. May cause an allergic skin reaction, skin rash and inflammation.

**Eye:** May cause mild irritation.

**Ingestion:**

Harmful if swallowed. May cause irritation, reddening and burning sensation to mouth and throat, abdominal cramps, anaemia, shortness of breath, dark urine, convulsions, jaundice, diarrhoea, weakness, nausea, sweating and dizziness.

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**Skin Corrosion / Irritation:** Based on classification principles, the classification criteria are not met.**Serious Eye Damage / Irritation:** Based on classification principles, the classification criteria are not met.**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 or repeated exposure may cause liver damage and possibly skin sensitisation.

**Existing Conditions Aggravated by Exposure:** No information available**Additional toxicological information:**

The Australian Acceptable Daily Intake (ADI) for metolachlor for a human is 0.08 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 7.5 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species.

(Ref: Australian Pesticides and Veterinary Medicines Authority, 'Acceptable Daily Intakes for Agricultural and Veterinary Chemicals', 2021).

## 12 Ecological Information

**Ecotoxicity:****Aquatic toxicity:**

Very toxic to aquatic life with long lasting effects.

**CAS: 64742-94-5 Solvent naphtha (petroleum), heavy arom.**

|           |                                 |
|-----------|---------------------------------|
| EC50/48 h | 12 mg/l (daphnia)               |
| EC50/72 h | 2.5 mg/l (skeletonema costatum) |
| LC50/96 h | 45 mg/l (fathead minnow)        |

**Persistence and Degradability:**

Metolachlor is biodegradable and is moderately persistent. Half-life in soil is 15-70 days. Half-life in water is 97-200 days.

**Bioaccumulative Potential:** No data available on finished product.**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.**Special Precautions for Landfill or Incineration:**

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

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## 14 Transport Information

|   |   |
|---|---|
| <b>UN Number<br/>ADG, IMDG, IATA</b>                                  | UN3082  |
| <b>Proper Shipping Name<br/>ADG, IATA</b>                             | ENVIRONMENTALLY HAZARDOUS SUBSTANCE,<br>LIQUID, N.O.S. (S-metolachlor)  |
| <b>IMDG</b>   | ENVIRONMENTALLY HAZARDOUS SUBSTANCE,<br>LIQUID, N.O.S. (S-metolachlor), MARINE POLLUTANT  |
| <b>Dangerous Goods Class<br/>ADG Class:<br/>Subsidiary Risk:</b>      | 9   |
| <b>Packing Group:<br/>ADG, IMDG, IATA</b>                             | III   |
| <b>Marine pollutant:</b>  | Symbol (fish and tree)  |
| <b>EMS Number:</b>  | F-A,S-F   |
| <b>Hazchem Code:</b>  | •3Z   |
| <b>Special Provisions:</b>  | 274, 331, 335, 375, AU01  |
| <b>Transport/Additional information:</b>                              | Not subject to the ADG Code when transported by road<br>or rail in packagings that do not incorporate a receptacle<br>exceeding 500 kg(L) or IBCs. (refer to SP AU01) |
| <b>Limited Quantities:</b>  | 5L  |
| <b>Packagings &amp; IBCs - Packing Instruction:</b>                   | P001, IBC03, LP01   |
| <b>Packagings &amp; IBCs - Special Packing Provisions:</b>            | PP1   |
| <b>Portable Tanks &amp; Bulk Containers - Instructions:</b>           | T4  |
| <b>Portable Tanks &amp; Bulk Containers - Special<br/>Provisions:</b> | TP1, TP29   |

## 15 Regulatory Information

**Australian Inventory of Industrial Chemicals:**

All components are on the inventory, or in compliance with the inventory.

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

Poisons Schedule: 5

**Australian Pesticides and Veterinary Medicines Authority:**

This product is registered with the Australian Pesticides and Veterinary Medicines Authority. APVMA number 62514.

## 16 Other Information

**Date of Preparation or Last Revision:** 02.12.2021**Prepared by:** MSDS.COM.AU Pty Ltd[www.msds.com.au](http://www.msds.com.au)**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

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

LC50: Lethal concentration, 50 percent

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 Sensitisation 1: Skin sensitisation, Hazard Category 1

Aspiration Hazard 1: Aspiration 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 - July 2020”

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