

Safety Data Sheet

according to WHS Regulations

Printing date 29.03.2018

Revision: 29.03.2018

1 Identification

Product Name: TITAN S-METOLACHLOR + PROSULFOCARB**Other Means of Identification:** Mixture**Recommended Use of the Chemical and Restriction on Use:** Agricultural herbicide**Details of Manufacturer or Importer:**Titan Ag Pty Ltd
15/16 Princess 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.

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)



corrosion

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



environment

Aquatic Chronic 2

H411 Toxic to aquatic life with long lasting effects.



Acute Toxicity (Oral) 4

H302 Harmful if swallowed.

Skin Corrosion/Irritation 2

H315 Causes skin irritation.

Skin Sensitisation 1

H317 May cause an allergic skin reaction.

Flammable Liquids 4

H227 Combustible liquid.

Aquatic Acute 2

H401 Toxic to aquatic life.

Signal Word Danger**Hazard Statements**

H227 Combustible liquid.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements

P210 Keep away from flames and hot surfaces. No smoking.

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

P264 Wash hands thoroughly after handling.

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

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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.
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P302+P352	IF ON SKIN: Wash with plenty of water.
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).
P330	Rinse mouth.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P370+P378	In case of fire: Use to extinguish: CO ₂ , powder or water spray.
P391	Collect spillage.
P403+P235	Store in a well-ventilated place. Keep cool.
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:**

52888-80-9	Prosulfocarb ⚠ Aquatic Chronic 2, H411; ⚠ Acute Toxicity (Oral) 4, H302; Skin Sensitisation 1, H317	80%
87392-12-9	S-metolachlor ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Skin Sensitisation 1, H317	12%
90194-26-6	Benzenesulfonic acid, 4-C10-14-alkyl derivatives, calcium salts ⚠ Skin Corrosion/Irritation 2, H315; Serious Eye Damage/Irritation 2A, H319	<10%
64742-94-5	Solvent naphtha (petroleum), heavy arom. ⚠ Aspiration Hazard 1, H304	<10%
78-83-1	2-methylpropan-1-ol ⚠ Flammable Liquids 3, H226; ⚠ Serious Eye Damage/Irritation 1, H318; ⚠ Skin Corrosion/Irritation 2, H315; STOT SE 3, H335-H336	<10%

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. Remove contact lenses, if present and easy to do. Seek medical attention if symptoms occur.

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. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Seek immediate medical attention.

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Symptoms Caused by Exposure:

Skin Contact: Causes skin irritation. May cause an allergic skin reaction.

Eye Contact: Causes serious eye damage.

Ingestion: Harmful if swallowed. May cause damage if aspirated into lungs.

5 Fire Fighting Measures

Suitable Extinguishing Media:

Water fog or fine spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Alcohol foam or water spray is recommended for large fires. Do not use full water jet as it may spread the fire.

Specific Hazards Arising from the Chemical:

Hazardous combustion products include toxic and irritating vapours.

Combustible liquid.

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

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 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. Decontaminate the spill area with detergent and water and rinse with a small volume of water.

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

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. Contaminated work clothing must not be allowed out of the workplace. 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. Keep tightly closed when not in use.

Do not store in direct sunlight for prolonged periods.

8 Exposure Controls and Personal Protection

Exposure Standards:**78-83-1 2-methylpropan-1-ol**WES TWA: 152 mg/m³, 50 ppm**Engineering Controls:**

Maintain air concentration below occupational exposure standards, providing adequate ventilation.

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Respiratory Protection:

Respiratory protection is not required under normal use conditions. 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:

Elbow-length chemical resistant 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.

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:	Slightly yellowish to brown
Odour:	No information available
Odour Threshold:	No information available
pH-Value:	5 - 9 (1% w/v)
Melting point/freezing point:	No information available
Initial Boiling Point/Boiling Range:	No information available
Flash Point:	85 °C (Pensky-Martens CC)
Flammability:	Combustible
Auto-ignition Temperature:	No information available
Decomposition Temperature:	No information available
Explosion Limits:	
Lower:	Not applicable
Upper:	Not applicable
Vapour Pressure:	No information available
Density at 20 °C:	1.046 g/cm ³
Vapour Density:	No information available
Evaporation Rate:	No information available
Solubility in Water:	Emulsifies into water.
Partition Coefficient (n-octanol/water):	No information available
Viscosity at 20 °C:	32.1 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 use.

Conditions to Avoid: No further relevant information available.

Incompatible Materials: No further relevant information available.

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Hazardous Decomposition Products: Toxic and irritating vapours.

11 Toxicological Information

Toxicity:**LD₅₀/LC₅₀ Values Relevant for Classification:**

Oral	LD ₅₀	>2000 mg/kg
Dermal	LD ₅₀	>2000 mg/kg
Inhalation	LC ₅₀ /4 h	>4.78 mg/l

78-83-1 2-methylpropan-1-ol

Oral	LD ₅₀	2,460 mg/kg (rat)
Dermal	LD ₅₀	3,400 mg/kg (rabbit)

Acute Health Effects**Inhalation:** No information available**Skin:** Causes skin irritation. May cause an allergic skin reaction.**Eye:** Causes serious eye damage.**Ingestion:** Harmful if swallowed. May cause damage if aspirated into lungs.**Skin Corrosion / Irritation:** Causes skin irritation.**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:** No information available**Existing Conditions Aggravated by Exposure:** No information available**Additional toxicological information:**

The Australian Acceptable Daily Intake (ADI) for prosulfocarb for a human is 0.02 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 1.9 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species.

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.

(Ref: Australian Pesticides and Veterinary Medicines Authority, 'Acceptable Daily Intakes for Agricultural and Veterinary Chemicals', 2018).

12 Ecological Information

Ecotoxicity:**Aquatic toxicity:**

Toxic to aquatic life with long lasting effects.

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LC ₅₀ /96 h	3.5 mg/l (rainbow trout)
EC ₅₀ /48 h	0.56 mg/l (daphnia)
EC ₅₀ /72 h	0.121 mg/l (pseudokirchnerie lla subcapitata)

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

EC ₅₀ /48 h	12 mg/l (daphnia)
EC ₅₀ /72 h	2.5 mg/l (skeletonema costatum)
LC ₅₀ /96 h	45 mg/l (fathead minnow)

Persistence and Degradability:

Prosulfocarb and S-metolachlor are not persistent in soil, with half-lives of 35 and 46 days respectively. Prosulfocarb is persistent in water.

Bioaccumulative Potential:

Prosulfocarb has a potential for bioaccumulation.
S-metolachlor does not bioaccumulate.

Mobility in Soil: Ingredients of this product have low to moderate mobility in soil.

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.

14 Transport Information

UN Number Not regulated

Proper Shipping Name Not regulated

Dangerous Goods Class Not regulated

Packing Group: Not regulated

15 Regulatory Information**Australian Inventory of Chemical Substances:**

90194-26-6	Benzenesulfonic acid, 4-C10-14-alkyl derivatives, calcium salts
64742-94-5	Solvent naphtha (petroleum), heavy arom.
78-83-1	2-methylpropan-1-ol

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

Poisons Schedule: 6

16 Other Information

Date of Preparation or Last Revision: 29.03.2018

Prepared by: MSDS.COM.AU Pty Ltd

www.msds.com.au

Abbreviations and acronyms:

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

LD₅₀: Lethal dose, 50 percent

IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit

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TWA: Time Weighted Average

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

Flammable Liquids 3: Flammable liquids – Category 3

Flammable Liquids 4: Flammable liquids – Category 4

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

Skin Corrosion/Irritation 2: Skin corrosion/irritation – Category 2

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

Serious Eye Damage/Irritation 2A: Serious eye damage/eye irritation – Category 2A

Skin Sensitisation 1: Skin sensitisation, Hazard Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Aspiration Hazard 1: Aspiration hazard – Category 1

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

Aquatic Acute 2: Hazardous to the aquatic environment, short-term (Acute). Category 2

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

Aquatic Chronic 2: Hazardous to the aquatic environment, long-term (Chronic). Category 2

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 - February 2016”

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