

Safety Data Sheet

according to WHS Regulations

Printing date 18.05.2022

Revision: 18.05.2022

1 Identification

Product Name: OPTIFERT BORON SOL 21%

Other Means of Identification: Substance

Recommended Use of the Chemical and Restriction on Use: Agricultural fertiliser

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.

Not 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.



Health hazard

Toxic To Reproduction 1B H360FD May damage fertility. May damage the unborn child.

Signal Word Danger

Hazard Statements

H360FD May damage fertility. May damage the unborn child.

Precautionary Statements

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national regulations.

3 Composition and Information on Ingredients

Chemical Characterisation: Substances

CAS No. Description

CAS: 12280-03-4 Disodium octaborate tetrahydrate - 100%

4 First Aid Measures

Inhalation: If inhaled, remove to fresh air. 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.

(Contd. on page 2)

Safety Data Sheet

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Printing date 18.05.2022

Revision: 18.05.2022

Product Name: OPTIFERT BORON SOL 21%

(Contd. of page 1)

Eye Contact:

In case of eye contact, rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes. Seek medical attention if symptoms persist.

Ingestion:

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

Symptoms Caused by Exposure:

Inhalation: Occasional mild irritation effects to nose and throat may occur from inhalation of disodium octaborate tetrahydrate dust at levels greater than 10 mg/m³.

Skin Contact: May cause skin irritation.

Eye Contact: May cause eye irritation.

Ingestion: Swallowing amounts larger than teaspoon may cause gastrointestinal irritation, sickness, vomiting and diarrhea. May be harmful if swallowed.

5 Fire Fighting Measures

Suitable Extinguishing Media: Use fire extinguishing methods suitable to surrounding conditions.

Specific Hazards Arising from the Chemical:

Hazardous combustion products include metal oxides.

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.

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

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 dust/particulate filter respirator and full protective clothing. Evacuate all non-essential personnel from affected area. Do not breathe dust. Do not touch or walk through spilled material. Ensure adequate ventilation. Avoid generating dust.

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:

Use vacuum equipment with HEPA filters to collect spilled material. Collect in suitable, closed containers for subsequent 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 dust.

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.

(Contd. on page 3)

Safety Data Sheet

according to WHS Regulations

Printing date 18.05.2022

Revision: 18.05.2022

Product Name: OPTIFERT BORON SOL 21%

(Contd. of page 2)

Conditions for Safe Storage:

Store in a cool, dry and well ventilated area. Keep container tightly closed when not in use. Protect from direct sunlight and high humidity. Keep away from strong reducing agents.

8 Exposure Controls and Personal Protection

Exposure Standards:

Nuisance dust:

TWA - 10 mg/m³ (total dust)TWA - 2 mg/m³ (inspirable dust)**Engineering Controls:**

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of dust below occupational exposure standards.

Respiratory Protection:

Where an inhalation risk exists, wear a Class P1 (particulate) respirator. At high dust levels, wear a powered air purifying respirator (PAPR) with Class P3 (Particulate) filter or an air-line respirator or a full-face Class P3 (particulate) respirator. See Australian/New Zealand Standards AS/NZS 1715 and 1716 for more information.

Skin Protection:

PVC, PVA, nitrile, neoprene, rubber or vinyl 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 dust. See Australian/New Zealand Standard AS/NZS 1337 for more information.

9 Physical and Chemical Properties

Appearance:**Form:**

Solid

Colour:

White

Odour:

Odourless

Odour Threshold:

No information available

pH-Value:

No information available

Melting point/freezing point:

No information available

Initial Boiling Point/Boiling Range:

No information available

Flash Point:

No information available

Flammability:

Product is not flammable

Auto-ignition Temperature:

No information available

Decomposition Temperature:

No information available

Explosion Limits:**Lower:**

No information available

Upper:

No information available

Vapour Pressure:

No information available

(Contd. on page 4)

Safety Data Sheet

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Printing date 18.05.2022

Revision: 18.05.2022

Product Name: OPTIFERT BORON SOL 21%

(Contd. of page 3)

Density: No information available
Vapour Density: No information available
Evaporation Rate: No information available
Solubility in Water: Soluble
Partition Coefficient (n-octanol/water): No information available

10 Stability and Reactivity

Possibility of Hazardous Reactions: No dangerous reactions known under conditions of normal use.

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

Conditions to Avoid: Direct sunlight and high humidity.

Incompatible Materials: Strong reducing agents.

Hazardous Decomposition Products: Hazardous combustion products include metal oxides.

11 Toxicological Information

Toxicity:

LD50/LC50 Values:

CAS: 12280-03-4 Disodium octaborate tetrahydrate

Inhalation	LC50	> 2 mg/L (rat)
Oral	LC50	2550 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rabbit)

Acute Health Effects

Inhalation:

Occasional mild irritation effects to nose and throat may occur from inhalation of disodium octaborate tetrahydrate dust at levels greater than 10 mg/m³.

Skin: May cause skin irritation.

Eye: May cause eye irritation.

Ingestion:

Swallowing amounts larger than that teaspoon may cause gastrointestinal symptoms. These symptoms could be sickness, vomiting and diarrhoea. May be harmful if swallowed.

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

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: May damage fertility or the unborn child.

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.

(Contd. on page 5)

Safety Data Sheet

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Revision: 18.05.2022

Product Name: OPTIFERT BORON SOL 21%

(Contd. of page 4)

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

12 Ecological Information

Ecotoxicity:

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Boron is an essential micronutrient for healthy growth of plants. However, it can be harmful to boron sensitive plants in high quantities. Care should be taken to minimize the amount of product released to the environment.

Aquatic toxicity:**CAS: 12280-03-4 Disodium octaborate tetrahydrate**

LOEC/32d 23 mg/L (fathead minnow)

NOEC/32d 11.2 mg/L (fathead minnow)

LC50/96hr 80 mg/l (fathead minnow)

Persistence and Degradability:

Boron is naturally occurring and ubiquitous in the environment. Disodium octaborate tetrahydrate decomposes in the environment to natural borate.

Bioaccumulative Potential: Boron accumulates in aquatic and terrestrial plants.**Mobility in Soil:** The product is soluble in water and is leachable through normal 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 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

(Contd. on page 6)

Safety Data Sheet

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Printing date 18.05.2022

Revision: 18.05.2022

Product Name: OPTIFERT BORON SOL 21%

(Contd. of page 5)

16 Other Information

Date of Preparation or Last Revision: 18.05.2022**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

TWA: Time Weighted Average

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

Toxic To Reproduction 1B: Reproductive toxicity – Category 1B

Data altered compared to the previous version:

Section 1: Product Name

Section 2: Hazardous Nature, Signal Word, Hazard Statements, Precautionary Statements

Section 4: Symptoms Caused by Exposure

Section 8: Exposure Standards

Section 11: Acute Health Effects, Reproductive Toxicity

Section 15: SUSMP Schedule

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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