

Safety Data Sheet

according to WHS Regulations

Print date: 02.09.2025

Revision date: 02.09.2025

1 Identification

Product Name: Optifert Magnesium Nitrate

Other Means of Identification: Mixture

Recommended Use of the Chemical and Restriction on Use:

Agricultural fertiliser, laboratory reagent, oxidising agent.

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.



GHS03 Flame over circle

Oxidising solids - Category 3 H272 May intensify fire; oxidizer.

Signal Word Warning

Hazard Statements

H272 May intensify fire; oxidizer.

Precautionary Statements

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P220 Keep/Store away from clothing/combustible materials.

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

P370+P378 In case of fire: Use CO2, powder or water spray to extinguish.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

3 Composition and Information on Ingredients

Chemical Characterisation: Substances

CAS No. Description

CAS: 13446-18-9 Magnesium nitrate, hexahydrate

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.

(Contd. on page 2)

Safety Data Sheet

according to WHS Regulations

Print date: 02.09.2025

Revision date: 02.09.2025

Product Name: Optifert Magnesium Nitrate

(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 irritation persists.

Ingestion:

If swallowed, do not induce vomiting. Wash mouth with water and give some water to drink. Do not give anything by mouth to an unconscious person. Seek medical attention if symptoms occur.

Symptoms Caused by Exposure:

Inhalation: May cause respiratory irritation.

Skin Contact: May cause skin irritation.

Eye Contact: May cause eye irritation.

Ingestion: May cause gastrointestinal irritation, nausea, diarrhoea and vomiting.

5 Fire Fighting Measures

Suitable Extinguishing Media: In case of small fire, use flooding quantities of water. Do not use water jet.

Specific Hazards Arising from the Chemical:

When involved in a fire, this product may generate some metallic oxides, nitrous gases, and the product will release water of crystallisation on heating.

Product is a non-flammable solid. However, product is an oxidizer and will support combustion of other material. May be combustible at high temperature. Slightly flammable to flammable in the presence of heat. Danger of explosion. Reactive with reducing agents. A strong oxidiser may cause violent combustion of oxidisable materials.

Contact with dimethyl formamide, combustible, organic, and oxidisable materials can generate heat, perhaps causing ignition and combustion.

Special Protective Equipment and Precautions for Fire Fighters:

Wear Safe Work Australia approved self-contained breathing apparatus and full protective clothing.

6 Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures:

Wear Safe Work Australia approved dust mask P1 and full protective clothing. Evacuate all non-essential personnel from affected area. Do not breathe dust. Ensure adequate ventilation. Avoid generating dust. Eliminate all sources of ignition. No smoking. Keep combustibles away from spilled material. Do not touch or walk through spilled material.

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 sweep/shovel up spills with binding material or use an industrial vacuum cleaner. Transfer to a suitable, labelled container and dispose of promptly as hazardous waste. Never return spilled product to the original container. Wash area down with excess water. Hold contaminated water for safe 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.

Conditions for Safe Storage:

Store in a cool, dry and well ventilated area. Keep container tightly closed when not in use. Protect from heat, sources of ignition, and combustible material, direct sunlight, moisture and static discharges. Product may possibly be hygroscopic. Do not store above 23 °C. Keep away from reducing agents, organic combustible substances such as amines, alcohols, ethers, ketones, and carboxylic acids, acids and alkalis.

(Contd. on page 3)

Safety Data Sheet

according to WHS Regulations

Print date: 02.09.2025

Revision date: 02.09.2025

Product Name: Optifert Magnesium Nitrate

(Contd. of page 2)

8 Exposure Controls and Personal Protection

Exposure Standards: Not required.**Engineering Controls:** Ensure adequate ventilation of the working area.**Respiratory Protection:**

Use a Safe Work Australia approved dust mask P1 under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of dust, 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 PVC gloves, cotton overall buttoned to the neck and wrist, safety boots and a washable hat. See Australian Standards AS/NZS 2161, 2210.1 and 2210.2 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:** Colourless**Odour:** Odourless**Odour Threshold:** No information available**pH-Value:** 5-7**Melting point/freezing point:** No information available**Initial Boiling Point/Boiling Range:** Decomposes at 330 °C**Flash Point:** Not applicable**Flammability:** Product is not flammable. Contact with combustibles may cause fire.**Auto-ignition Temperature:** No information available**Decomposition Temperature:** 330 °C**Explosion Limits:****Lower:** No information available**Upper:** No information available**Vapour Pressure:** Not applicable**Relative Density at 20 °C:** 1.64 g/cm³**Vapour Density:** Not applicable**Evaporation Rate:** Not applicable**Solubility in Water at 20 °C:** 420 g/l**Partition Coefficient (n-octanol/water):** 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:**

Heat, sources of ignition, and combustible material, direct sunlight, moisture and static discharges.

Incompatible Materials:

Reducing agents, organic combustible substances such as amines, alcohols, ethers, ketones, and carboxylic acids, acids and alkalis.

Hazardous Decomposition Products:

Metallic oxides, nitrous gases, and the product will release water of crystallisation on heating.

(Contd. on page 4)

Safety Data Sheet

according to WHS Regulations

Print date: 02.09.2025

Revision date: 02.09.2025

Product Name: Optifert Magnesium Nitrate

(Contd. of page 3)

11 Toxicological Information

Toxicity:**Acute Health Effects****Inhalation:** May cause respiratory irritation.**Skin:** May cause skin irritation.**Eye:** May cause eye irritation.**Ingestion:** May cause gastrointestinal irritation, nausea, diarrhoea and vomiting.**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:** Based on classification principles, the classification criteria are not met.**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 data associated with long term health effects.**Existing Conditions Aggravated by Exposure:** No data available.

12 Ecological Information

Ecotoxicity:**Aquatic toxicity:** No data available on finished product.**Persistence and Degradability:** No data available on finished product.**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.

14 Transport Information

UN Number**ADG** Not regulated**Proper Shipping Name****ADG** Not regulated**Dangerous Goods Class** Not regulated**Packing Group:** Not regulated

(Contd. on page 5)

Safety Data Sheet

according to WHS Regulations

Print date: 02.09.2025

Revision date: 02.09.2025

Product Name: Optifert Magnesium Nitrate

(Contd. of page 4)

15 Regulatory Information

Australian Inventory of Industrial Chemicals:

CAS: 13446-18-9 Magnesium nitrate, hexahydrate

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Poison Schedule:
Not a scheduled poison.

16 Other Information

Date of Preparation or Last Revision: 02.09.2025**Prepared by:** MSDS.COM.AU Pty Ltdwww.msds.com.au**Abbreviations and acronyms:**

ADG: Australian Dangerous Goods

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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

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)

Oxidising solids - Category 3: Oxidising solids, Hazard Category 3

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 - June 2023".

The information contained in this safety data sheet is provided in good faith and is believed to be accurate at the date of issuance. Titan Ag Pty Ltd makes no representation of the accuracy or comprehensiveness of the information and to the full extent allowed by law excludes all liability for any loss or damage related to the supply or use of the information in this material safety data sheet. MSDS.COM.AU Pty Ltd is not in a position to warrant the accuracy of the data herein. The user is cautioned to make their own determinations as to the suitability of the information provided to the particular circumstances in which the product is used.