

SAFETY DATA SHEET

According to Safe Work Australia

Printing date 13.01.2015

Revision: 13.01.2015

1 . IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Name: TITAN MAGNESIUM NITRATE HEXAHYDRATE SOLUBLE**Other Means of Identification:** Inorganic salt**Recommended Use of the Chemical and Restriction on Use:**

Agricultural fertiliser, laboratory reagent, oxidising agent

Details of Manufacturer or Importer:Titan Ag Pty Ltd
Suite 15 / 16 Princes Street
Newport NSW 2106**Phone Number:** 02 9999 6655**Emergency telephone number:** 02 9999 6655

2 . HAZARDS IDENTIFICATION

Hazardous Nature:

Classified as Hazardous according to criteria of National Occupational Health & Safety Commission (NOHSC), Australia.

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



flame over circle

Ox. Liq. 2 H272 May intensify fire; oxidiser.



Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

Signal Word Danger**Hazard Statements**

H272 May intensify fire; oxidiser.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Precautionary Statements

P221 Take any precaution to avoid mixing with combustibles.

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

P220 Keep/Store away from clothing/combustible materials.

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

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

P264 Wash hands thoroughly after handling.

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

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P321 Specific treatment (see on this label).

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P332+P313 If skin irritation occurs: Get medical advice/attention.

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P337+P313	If eye irritation persists: Get medical advice/attention.
P370+P378	In case of fire: Use for extinction: CO ₂ , powder or water spray.
P302+P352	IF ON SKIN: Wash with plenty of water.
P312	Call a POISON CENTER/doctor if you feel unwell.
P362+P364	Take off contaminated clothing and wash it before reuse.
P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P501	Dispose of contents/container in accordance with local/regional/national regulations.

3 . COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical Characterisation: Substances**CAS No. Description**

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.

Eye Contact:

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

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: Irritating to mucous membranes. May affect lungs and central nervous system.

Skin Contact: May cause slight skin irritation.

Eye Contact: May cause serious eye irritation.

Ingestion: Ingestion may cause nausea and vomiting. Absorption of large quantities may cause fatigue, methaemoglobinaemia with headache, cardiac arrhythmias, drop in blood pressure, dyspnoea and spasms. Key symptom, cyanosis (blue discolouration of the blood).

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.

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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 dust 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.

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.

Personal Protective Equipment (PPE):**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.

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9 . PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Form:	Solid
Colour:	Colourless
Odour:	Odourless
Odour Threshold:	Odourless
pH-Value:	5-7
Melting point/Melting range:	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:	Not applicable
Upper:	Not applicable
Vapour Pressure:	No information available
Relative Density at 20 °C:	1.64 g/cm ³
Vapour Density:	No information available
Evaporation Rate:	No information available
Solubility in Water at 20 °C:	420 g/l

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:

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.

11 . TOXICOLOGICAL INFORMATION

Toxicity:**LD₅₀/LC₅₀ Values Relevant for Classification:****Magnesium nitrate, hexahydrate**

Oral	LD50	5440 mg/kg (rat)
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Acute Health Effects**Inhalation:**

May cause respiratory irritation. Irritating to mucous membranes. May affect lungs and central nervous system.

Skin: May cause slight skin irritation.

Eye: May cause serious eye irritation.

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Ingestion:

Ingestion may cause nausea and vomiting. Absorption of large quantities may cause fatigue, methaemoglobinaemia with headache, cardiac arrhythmias, drop in blood pressure, dyspnoea and spasms. Key symptom, cyanosis (blue discolouration of the blood).

Skin Corrosion / Irritation: Causes skin irritation.**Serious Eye Damage / Irritation:** Causes serious eye irritation.**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:** Based on classification principles, the classification criteria are not met.**Specific Target Organ Toxicity (STOT) - Single Exposure:**

May cause respiratory irritation.

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:**

Repeated or prolonged skin exposure may cause skin burns and ulcerations.

Repeated exposure may cause kidney damage and digestive tract abnormalities. Effects may be delayed.

May affect lung and central nervous system. Excessive amounts of magnesium may cause central nervous system depression, and may also affect the heart.

Existing Conditions Aggravated by Exposure: No information available

12 . ECOLOGICAL INFORMATION

Ecotoxicity: No information available**Aquatic toxicity:**

Lethal concentration for fish: 100-400mg/L.

The following applies to nitrates in general - May contribute to the eutrophication of water supplies.

Persistence and Degradability: The products of degradation are more toxic.**Bioaccumulative Potential:** No information available**Mobility in Soil:** No information available**Other adverse effects:** No 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

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Dangerous Goods Class Not regulated**Packing Group:** Not regulated**15 . REGULATORY INFORMATION****Australian Inventory of Chemical Substances:**

Magnesium nitrate, hexahydrate

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

Not a scheduled poison.

16 . OTHER INFORMATION**Creation Date:** 13.01.2015**Prepared by:** MSDS.COM.AU Pty Ltdwww.msds.com.au**Abbreviations and acronyms:**

ADG: Australian Dangerous Goods

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

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

LC₅₀: Lethal concentration, 50 percentLD₅₀: 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)

Disclaimer

This MSDS is prepared in accord with the Safe Work Australia document "Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - December 2011"

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