

MATERIAL SAFETY DATA SHEET**Product Name:** Magnesium nitrate hexahydrate**CAS No.:** 13446-18-9**Version:** 0**1. Identification**

Product Code : 90180, 90448
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2. Composition/Information on Ingredients

Ingredient	CAS No	Percent
MAGNESIUM NITRATE HEXAHYDRATE	13446-18-9	100 %

3. Hazards Identification

Emergency Overview : DANGER! STRONG OXIDIZER. CONTACT WITH OTHER MATERIAL MAY CAUSE FIRE.
HARMFUL IF SWALLOWED OR INHALED. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT.

Saf-T-Data

Health Rating : 2 - Moderate
Flammability Rating : 0 - None
Reactivity Rating : 3 - Severe (Oxidizer)
Contact Rating : 3 - Severe

Potential Health Effects

Inhalation : May cause irritation and burns to the respiratory tract; symptoms may include coughing and shortness of breath.

Ingestion : Large oral doses of nitrates may cause dizziness, abdominal pain, vomiting, bloody diarrhea, weakness, convulsions, and collapse. May interfere with blood's capability to carry oxygen (methemoglobinemia), as evidenced by bluish color to skin and lips.

Skin Contact : Causes irritation and burns to the skin.

Eye Contact : Causes irritation. May be extremely irritating with possible burns to eye tissue and permanent eye damage may result.

Chronic Exposure : Repeated small oral doses of nitrates may cause weakness, depression, headache, and mental impairment. Chronic exposures may affect ability of blood to carry oxygen, causing the lips and skin to turn blue.

Aggravation of Pre-existing Conditions : No information found

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- General information** : Get medical advice/attention if you feel unwell. If medical advice is needed, have product container or label at hand. Show this safety data sheet to the doctor in attendance.
- Inhalation** : Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention
- Ingestion** : Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.
- Skin Contact** : Not expected to require first aid measures. Wash exposed area with soap and water. Get medical advice if irritation develops.
- Eye contact** : Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists.

5. Fire fighting measures

- Fire** : Not combustible, but substance is a strong oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition.
- Explosion** : Contact with oxidizable substances may cause extremely violent combustion.
- Fire Extinguishing Media** : Use any means suitable for extinguishing surrounding fire.
- Special Information** : In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

6. Accidental Release Measures

- Personal precautions, protective equipment and emergency procedures** : Keep unauthorized personnel away. Keep upwind. Ventilate closed spaces before entering them. Avoid inhalation of dust. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Methods and material for containment and cleaning up** : Sweep up and place in a clearly labeled container for chemical waste.
Clean surface thoroughly to remove residual contamination.
- Notification Procedures** : Prevent entry into waterways, sewer, basements or confined areas. Inform authorities if large amounts are involved.
- Environmental precautions** : Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

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- Precautions for safe handling** : Protect against physical damage. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.
- Conditions for safe storage, including any incompatibilities** : Keep containers tightly closed. Store in cool, dry place. Store in a well-ventilated place.

8. Exposure Controls Personal Protection

- Control parameters**
- Occupational exposure limits** : None established.
- Ventilation System** : A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.
- Personal Respirators (NIOSH Approved):** : For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator.
WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.
- Skin Protection** : Wear protective gloves and clean body-covering clothing.
- Eye Protection:** : Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.
- Other** : Clothing contaminated with this material may be an increased fire hazard. Wash contaminated clothing as soon as possible.
- Respiratory protection** : In case of inadequate ventilation use suitable respirator.
- Hygiene measures** : Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Provide eyewash station and safety shower.

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9. Physical and Chemical Properties

Appearance	:	White crystals.
Odor	:	Odorless.
pH	:	No information found.
Melting point/freezing point	:	89C (192F)
Initial boiling point and boiling range	:	330C (626F)
Flash Point	:	No information found.
Vapor pressure	:	No information found.
Vapor density	:	No information found.
Relative density	:	1.46
Solubility in water	:	125g/100ml water.
Solubility (other)	:	No data available.
Formula	:	Mg(NO ₃) ₂ 6H ₂ O
Molecular Weight	:	256.41 g/mol

10. Stability and Reactivity

Stability	:	Stable under ordinary conditions of use and storage.
Hazardous Decomposition Products	:	Oxides of nitrogen and toxic metal fumes may form when heated to decomposition.
Hazardous Polymerization	:	Will not occur.
Incompatibilities:	:	Dimethyl formamide, combustible, organic and oxidizable materials.
Conditions to Avoid:	:	Heat, incompatibles.

11. Toxicological Information

No LD50/LC50 information found relating to normal routes of occupational exposure.

Cancer Lists			
Ingredient	IARC Monographs on the Evaluation of Carcinogenic Risks to Humans DIOXANE	US. National Toxicology Program (NTP) Report on Carcinogens DIOXANE	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Magnesium Nitrate (10377-60-3)	No	No	None

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12. Ecological Information

Ecotoxicity

Acute hazards to the aquatic environment :

Fish Product : No data available.

Aquatic invertebrates Product : No data available.

Chronic hazards to the aquatic environment :

Fish Product : No data available.

Aquatic invertebrates Product : No data available.

Toxicity to Aquatic Plants Product: : No data available.

Persistence and degradability

Biodegradation Product : No data available.

BOD/COD ratio Product : No data available.

Bioaccumulative potential

Bioconcentration factor (BCF) Product : No data available on bioaccumulation.

Product

Partition coefficient n-octanol / water (log Kow) Product : No data available.

Mobility in soil : No data available.

Other adverse effects : No data available.

13. Disposal consideration

Disposal instructions : Discharge, treatment, or disposal may be subject to national, state, or local laws. Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Contaminated packaging : Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. Transport Information

	UN No.	UN proper shipping name	Hazard Class(es)	Packaging group	Marine Pollutant
DOT	UN1474	MAGNESIUM NITRATE	5.1	III	No
IMDG	UN1474	MAGNESIUM NITRATE	5.1	III	No
IATA	UN1474	MAGNESIUM NITRATE	5.1	III	No

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This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Safety, health and environmental regulations/legislation specific for the substance or mixture
No Data Available.

16. Other Information**Issue Date :**01/08/2014**Version : 0**

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