



Material Safety Data Sheet / Safety Data Sheet

Magnesium Nitrate

Section 1. Chemical Product and Company Identification

Product name	: Magnesium Nitrate	Manufactured/supplied
Trade name	: Magnisal	Haifa Chemicals Ltd.
Synonym	: Nitric acid, magnesium(II) salt; magnesium (II) nitrate hexahydrate.	P.O. Box 10809, Haifa Bay 26120, Israel
Fertilizer formula	: 11-0-0+16MgO	Tel: 972-4-8469616
Chemical formula	: $Mg(NO_3)_2 \cdot 6H_2O$	Fax: 972-4-8469653
Material uses	: Fertilizer and nutrigation and foliar feeding.	Email: specialty@haifachem.co.il
Emergency telephone number	: 972-4-8469603/4	

Section 2. Hazards identification

Physical state	: Solid. (Flakes.)
Emergency overview	: No specific hazard. USE WITH CARE. Follow good industrial hygiene practice. Seal properly after usage. Store under cool dry conditions. Keep out of the reach of children.
Routes of entry	: Skin contact. Eye contact. Inhalation. Ingestion.
Potential acute health effects	
Eyes	: No known significant effects or critical hazards.
Skin	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Ingestion	: Practically non-toxic if swallowed.
Potential chronic health effects	: Carcinogenic effects: Not classified or listed by IARC, NTP, OSHA, EU and ACGIH. Mutagenic effects: Not available. Teratogenic effects: Not available.
Over-exposure signs/symptoms	: None known.
See toxicological information (section 11)	

Section 3. Composition, Information on Ingredients

	CAS number
United States Magnesium Nitrate Hexahydrate	13446-18-9

This material is classified as not hazardous under OSHA regulations.
See Chapters 8, 11 and 14 for details.

Continued on next page

Section 4. First aid measures

- Eye contact** : Check for and remove any contact lenses. In case of contact with eyes, rinse immediately with plenty of water. Get medical attention if symptoms occur.
- Skin contact** : Wash with soap and water. Get medical attention if symptoms occur.
- Inhalation** : If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms appear.
- Ingestion** : Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.
- Notes to physician** : No specific antidote. Medical staff must contact Poison Control Center.

Section 5. Fire fighting measures

- Flammability of the product** : Non-flammable.
- Products of combustion** : Not applicable.
- Explosion hazards in the presence of various substances** : Risks of explosion of the product in presence of mechanical impact: Not applicable.
Risks of explosion of the product in presence of static discharge: Not applicable.
- Use an extinguishing agent suitable for the surrounding fire.
Not available.
Not available.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

- Personal precautions** : Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment.
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
- Methods for cleaning up** : If emergency personnel are unavailable, vacuum or carefully scoop up spilled material and place in an appropriate container for disposal by incineration. Avoid creating dusty conditions and prevent wind dispersal.

Section 7. Handling and storage

- Handling** : Wash thoroughly after handling.
- Storage** : Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8. Exposure controls, personal protection

- Engineering controls** : Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fumes or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
- Personal protection**
- Eyes** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.
Recommended: Safety glasses.
- Respiratory** : Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Recommended: Disposable particulate mask



Hands : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.: Disposable vinyl gloves.



Skin/Body : Not applicable.

Personal protection in case of a large spill : Safety glasses, goggles or face shield. Impervious gloves. Full suit. Boots. Wear MSHA/NIOSH-approved self-contained breathing apparatus or equivalent and full protective gear.

Consult local authorities for acceptable exposure limits.

Section 9. Physical and chemical properties

Physical state : Solid. (Flakes.)
Color : White, or yellowish-greenish white.
Odor : Odorless.
Molecular weight : 256.41 g/mole
Molecular formula : $\text{Mg}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$
pH : 4 to 8 (Conc. (% w/w): ≥ 1)
Boiling/condensation point : Decomposition temperature: 330°C (626°F)
Melting/freezing point : 89°C (192.2°F)
Bulk density : 0.8 g/cm³
Vapor pressure : Not applicable
Evaporation rate : Not applicable
Viscosity : Non-viscous substance.
LogK_{ow} : The product is more soluble in water; log(octanol/water) <1
Solubility : Soluble in cold water, hot water.
 Partially soluble in methanol.

Section 10. Stability and reactivity

Stability and reactivity : The product is stable.
Conditions of instability : Decomposes on heating.
Incompatibility with various substances : Reactive with reducing agents, organic materials, alkalis.
Hazardous decomposition products : None known.
Hazardous polymerization : Will not occur.

Section 11. Toxicological information

Toxicity data

<u>Ingredient name</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
Magnesium nitrate, hexahydrate	LD50	5440 mg/kg	Oral	Rat

Acute Effects

Eyes : No known significant effects or critical hazards.
Skin : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Ingestion : Practically non-toxic if swallowed.
Potential chronic health effects : Carcinogenic effects: Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.
 Mutagenic effects: Not available.
 Teratogenic effects: Not available.
Special remarks on chronic effects on humans : Ingestion of large quantities may cause nitrate poisoning.

Section 12. Ecological information

- Biodegradable/OECD** : Not applicable, since inorganic substance.
Substances, which have an unfavorable influence on the oxygen balance and can be measured using parameters such as BOD, COD, etc.
- Mobility** : Soluble in water.
- Persistence/degradability** : Not applicable, since inorganic substance.
- Other adverse effects** : Substances, which contribute to eutrophication: Nitrates.

Section 13. Disposal considerations

- Waste disposal** : The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Consult your local or regional authorities.

Section 14. Transport information

Classification

DOT/IMDG/IATA: Not regulated.

Label

Additional information

Section 15. Regulatory information

United States

- U.S. Federal regulations** : TSCA: All components listed.
SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: No products were found.
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No products were found.
Clean Water Act (CWA) 307: No products were found.
Clean Water Act (CWA) 311: No products were found.
Clean Air Act (CAA) 112 accidental release prevention: No products were found.
Clean Air Act (CAA) 112 regulated flammable substances: No products were found.
Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

SARA 313

	Product name	CAS number	Concentration
Form R - Reporting requirements	: Magnesium nitrate, hexahydrate	13446-18-9	70 - 100
Supplier notification	: Magnesium nitrate, hexahydrate	13446-18-9	70 - 100
SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.			
State regulations	: California prop. 65: No products were found.		
International regulations			
International lists	: All components listed are listed on major international inventories or exempted from being listed in Australia (AICS), Europe (EINECS/ELINCS), Korea (TCCL), Japan (METI/MOL), Philippines (RA6969).		

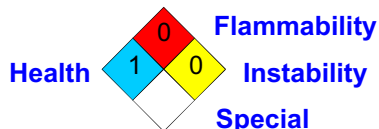
Continued on next page

Section 16. Other information

Hazardous Material
Information System (U.S.A.) :

Health	1
Fire hazard	0
Reactivity	0
Personal protection	C

National Fire Protection
Association (U.S.A.) :



References

: ANSI Z400.1, MSDS Standard, 2004. - Manufacturer's Material Safety Data Sheet. -
29CFR Part1910.1200 OSHA MSDS Requirements. - 49CFR Table List of Hazardous
Materials, UN#, Proper Shipping Names, PG.

Date of issue :

06/24/2009

Version :

2

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.