Safety Data Sheet

In accordance with COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010

Magnesium Nitrate Horticultural Grade

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name: **Van Iperen Magnesium Nitrate Horticultural Grade**
Common name: Magnesium Nitrate Hexahydrate
Nr CAS 13446-18-9
Nr EC 233-826-7
Registration number: 01-2119491164-38-0015

1.2. Relevant identified uses of the substance or mixture.

Uses by workers in industrial settings:
1: Manufacturing of the substance, including handling, storage and quality control.
2: Sampling, loading, filling, transfer, dumping, bagging of substance (charging/discharging) at (non-)dedicated facilities. Industrial/professional settings.
3: Transfer of substance into small containers (dedicated filling line, including weighing). Industrial setting.
4: Quality control
5: Use of magnesium nitrate for formulation of preparations for biocidal products, fertilizers, processing aids, laboratory chemicals and plant protection
6: Industrial use as intermediate to synthesize other substances
7: Industrial use as water treatment chemical
8: Industrial end use as catalyst
Uses by professional workers:
9: Professional end-use as processing aid
10: Professional end-use as fertilizer
11: Sampling, loading, filling, transfer, dumping, bagging of substance (charging/discharging) at (non-)dedicated facilities. Professional setting.
12: Transfer of substance into small containers (dedicated filling line, including weighing). Professional setting.
13: Professional end-use of ink and toners
14: Professional end-use of antiicing agent
Uses by consumers:
16: Consumer use of ink and toners containing magnesium nitrate
17: Consumer use of magnesium nitrate in anti-freeze and de-icing products
18: Consumer use of magnesium nitrate in fertilizers
19: Consumer use of textile dyes containing magnesium nitrate.

1.3. Details of the supplier of the safety data sheet

Van Iperen International BV
Smidsweg 24
3273 LK Westmaas - Nederland
T +31 (0) 186 578 888 - F +31 (0) 186 573 452
info@iperen.com - www.vaniperen.com

1.4. Emergency telephone number

Country	Official advisory body	Address	Emergency number
Ireland (Republic of)	National Poisons Information Centre Beaumont Hospital	Beaumont Hospital Beaumont Road 9 Dublin	: +353 1 8379964
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	0870 243 2241

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

None.
Classification according to directive 67/548/EEC: None.

2.2. Label elements GHS

None

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.1 Substance

Name of substance	Identifier	Classification 67/548/EWG	Classification 1272/548/EC	% weight
Magnesium nitrate hexahydrate	CAS 13446-18-9 WE 233-826-7	None	None	99
Water	CAS 7732-18-5 EC 231-791	1		
Chemical formulas:	Mg(NO3)2 x 6 H2O			
Molecular weight.	256,41			

SECTION 4: First aid measures

4.1. Description of first aid measures

Attention: Causes irritation to eyes and digestive system (if swallowed) and skin.
Eye contact: Immediately flush eyes with large amounts of water for at least 15 minutes while holding the eyelids open to ensure that the entire surface is flushed. Seek medical advice
Ingestion: Wash mouth out with water. Drink 1-2 glass of water. Seek medical advice.
Skin contact: After contact with skin, wash with plenty of water. To take off contaminated cloths.

4.2. Most important symptoms and effects, both acute and delayed

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available.
In the case of abnormal symptoms contact with medicine doctor.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Use water only!. Contact professional fire-fighters immediately. For small fires, do NOT use chemicals, carbon dioxide, halon or foams. For large fires flood fire with water from a distance.

5.2. Special hazards arising from the substance or mixture

In case of fire, the following can be released: Nitrogen oxides (NOx)
Protective equipment:
High temperatures may cause pressure build-up in closed containers.
During the thermal decomposition produced of harmful compounds. Reduce dust and vapour with water spray.
Brown fumes containing toxic nitrogen oxides
Explosive mixture: Not applicable-non-explosive.

5.3. Advice for firefighters

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Clothing resistant to high temperatures. Independent self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment (section 8).
Avoid contact with eyes. Do not let this chemical enter the environment. Do not ingest.

6.2. Environmental precautions

Avoid direct discharge into drains.

6.3. Methods and material for containment and cleaning up

Use appropriate tools to put the spilled solid in a convenient waste disposal container. If necessary: Collect up the product and place it in a sealable container . Suitably labeled. Transfer carefully to container. Then take the spare containers to an area reserved for subsequent recycling or disposal. Do not put the cast down material back into the original container, for re-use. Avoid prolonged or repeated exposure.

6.4. Reference to other sections

Section 8. Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Keep in original containers in a covered warehouse. Storage in dry area. Protect from direct sunlight.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from incompatibles such as reducing agents, flammable agents, strong acids. Keep away from foodstuffs, beverages and feed. Keep away from heat and sources of ignition.

7.3. Specific end use(s)

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Regulated occupational exposure limit values: none

Recommended occupational, consumer and environmental exposure limit values (following from the performed CSA):

Exposure pattern	Derived No Effect Level (DNEL)	
	Workers	General population
Oral[1]	Not applicable	12,5 mg/kg bw/d
Dermal[1]	20,8 mg/kg bw/day	12,5 mg/kg bw/day
Inhalation[1]	36,7 mg/m_3	10,9 mg/m^3
	Predicted No Effect Level (PNEC)[2]	
Aqua-freshwater	0.45 mg/l	
Aqua-marine water	0.045 mg/l	
Aqua-intermittent release	4.5 mg/l	
STP	18 mg/l	

[1]: As the substance is classified for acute oral toxicity an acute DNEL should be derived for the general population. However, peak exposure is considered not possible and therefore an acute DNEL systemic will not be derived. Therefore, the long-term DNEL is considered sufficient to ensure that effects from acute oral exposure to the substance do not occur. As an dermal and inhalation acute toxicity hazard leading to Classification and Labelling of the substance has not been identified, the long-term DNEL is considered sufficient to ensure that effects from acute exposure to the substance do not occur (in accordance with ECHA Guidance on information requirements and chemical safety assessment: Chapter R.8: Characterisation of dose [concentration]-response for human health, May 2008 and Part B: Hazard Assessment, Draft new chapter B.8 Scope of Exposure Assessment, March 2010).

[2]: PNECsediment/soil/oral are not derived as these are not applicable/not relevant.

8.2. Exposure controls

Engineering Controls: No engineering controls.

General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with eyes.



Eye protection: Use safety goggles.

Protection of hands: The selected protective gloves have to satisfy the specifications of UE Directive 89-689-EEC and standard EN 374 derived from it.

Body protection: Use work clothes and shoes.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:	Solid. color: white, white-yellow.
Odour:	Specific.
pH (5% solution):	5- 7,5
Flash point:	Inorganic substances.
Melting / freezing point:	95°C at 1013 hPa
Initial boiling point and boiling range:	Not available.
Flashpoint:	No data.
Evaporation Rate:	No data.
Flammability (solid);	Not flammable.
Relative density at 20°C:	1.46 g/cm3
Water solubility:	Very good
Upper / lower flammability or upper / lower explosion limit:	Not applicable-non-combustible.
Vapor Pressure:	<0.00001 Pa at 20 ° C
Partition coefficient: n- octanol/water:	Not available
Auto-ignition temperature:	No data.
Decomposition temperature:	No data.
Explosive properties:	Not explosive,
Viscosity:	Not applicable.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactive with strong reducing agents.

10.2. Chemical stability

Under normal storage and use of the substance is chemically stable.

10.3. Possibility of hazardous reactions

The substance reacts with strong reducing agents.

10.4. Conditions to avoid

Avoid contact with strong heat sources such as solar radiation and flames.

10.5. Incompatible materials
Strong reducing agents.

10.6. Hazardous decomposition products
Intensive heated to temperatures> 330 ° C followed by decomposition with emission of toxic gases (nitrogen oxides).

SECTION 11: Toxicological information

11.1. Acute toxicity

Substances	LD50 (oral):> 2000 mg / kg	LD50 (dermal):> 5000 mg / kg
	on the eyes: no sensitizing effects known.	ingestion: no sensitizing effects known.
	sensitization by inhalation or skin;: no sensitizing effects known.	other information: no data.
Repeated dose toxicity	For NOAEL: ≥ 1500 mg / kg / day (subacute effect, rat)	There is no effect on classification.
Delayed and chronic effects:	Cancirogencity:	Magnesium nitrate hexahydrate is not a carcinogen
	Mutagenicity:	Magnesium nitrate hexahydrate is not mutagenic.
	Reproductive toxicity:	The substance is not a threat to fertility. .
		NOAEL: ≥ 1500 mg / kg / day (orally)
	Narcosis:	Not available.

SECTION 12: Ecological information

12.1. Toxicity
magnesium nitrate hexahydrate

There is no direct test for magnesium nitrate.	The data were based on studies of similar substances.
LC50 for freshwater fish: 1378 mg / L	EC50/LC50 for freshwater invertebrates: 490 mg / L
EC50/LC50 for freshwater algae:> 1700 mg / L	EC10/LC10 or freshwater algae NOEC: 1700 mg / L
EC50/LC50 aquatic microorganisms:> 1000 mg / L	EC10/LC10 or NOEC aquatic organisms: 180 mg / L
PNEC aqua (water freshwater): 0.45 mg / L	PNEC aqua (sea water): 0.045 mg / L
PNEC (broken version): 4.5 mg / L	

12.2. Persistence and degradability
Decomposition under anaerobic conditions in wastewater treatment plants.

12.3. Bioaccumulative potential
The substance has a low potential for biodegradation

12.4. Mobility in water and soil
Freely soluble in water. Very quickly penetrates into the groundwater.

12.5. Results of PBT and vPvB assessment
The substance has not PBT and vPvB assesment.

12.6. Other adverse effects
None.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste Removal: Apply as fertilizer or transfer for disposal.
Disposing of the packaging: Empty containers contain residue of material on the inner surfaces. Thoroughly empty containers to be transmitted to authorized waste collector. Empty packaging completely. Prevent pollution of surface waters.

Contaminated packaging:	EC codes:	15 01 02	plastic packaging;
Prohibition:	Do not dispose of untreated packing with ordinary industrial wastes.		
NOTE:	The user's attention is drawn to the possible existence of local regulations regarding disposal.		

SECTION 14: Transport information

14.1. Number information
Not applied

14.2. UN proper shipping name
Not applied

14.3. LAND TANSPORT ADR/RID (CROSS / BORDER)
Not applied

14.4 MARITIME TRANSPORT IMDG
Not applied

14.5 AIR TRANSPORT ICAO-TI and iata-dgr
Not applied

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulation (EC) No 1272/2008 (CLP) of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (REACH).

REGULATION (EC) No 1907/2006 OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

15.2. Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information

Based on these results Magnesium nitrate hexahydrate does not have to be classified and has no obligatory labelling requirement for eye irritation according to the:

- Globally Harmonized System of Classification and Labelling of Chemicals (GHS) of the United Nations (2007),
- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.

This information is based on the present state of our knowledge, they are no assurance of product features and shall not establish a contractual relationship.

• Department issuing MSDS:

• Abbreviations and Acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO) PP: Severe Marine Pollutant
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
Legend:
n.a. = Not applicable / n.a. = Grouting not / Not avail-able = Checked to / not k.D.v. = No data available

• Data from the previous version changed:

The information in this safety data sheet is required pursuant to EC Directive 91/155/EEC and its amendments.
Note to readers
The information in this SDS is based on our current knowledge and the current legislation.
The product shall not, without first obtaining written Instructions for purposes other than those mentioned in Section 1 purpose be used. It is always the user's responsibility to ensure compliance with statutory. Provisions to ensure. The information in this Safety Data Sheet describing the safety requirements for our product.

Company disclaimer

The information provided in this safety data sheet is correct to the best of our knowledge, information, and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any proceed, unless specified in the text.