

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

1.1. Product identifier

Product form	: Substance
Trade name	: Maganit
Chemical name	: Mg(NO ₃) ₂ ·6H ₂ O
IUPAC name	: Magnesium dinitrate hexahydrate
EC no	: 233-826-7
CAS No	: 13446-18-9
REACH registration No	: 01-2119491164-38
Type of product	: Fertilizer
Synonyms	: Maganit
Product group	: Raw material

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category	: Professional use
Industrial/Professional use spec	: Fertilizer
Use of the substance/mixture	: Agriculture.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Anorel NV
 Lintsesteenweg 632
 2540 Hove
 T +3234880233
anorel@anorel.net - www.anorel.net

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
Greece	Poisons Information Centre Children's Hospital "Aglaia. Kyriakou"	11527 Athens	+30 10 779 3777	
Iceland	Eitrunarmiðstöð Landspítali	Fossvogi 108 Reykjavik	+354 543 22 22	
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2166 (public, 8am - 10pm, 7/7)	
Israel	Israel Poison Information Center Rambam Health Care Campus	6 Ha'Aliya Street 31096 Haifa	+972 4 854 1900	
Malta	Medicines & Poisons Info Office	Mater Dei Hospital MSD Msida	+356 2545 6504	
United Kingdom	National Poisons Information Service (Cardiff Centre) Gwenwyn Ward, Llandough Hospital	Penarth CF64 2XX Cardiff	0844 892 0111	UK only, Monday to Friday, 08.00 to 18.00 hours

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Serious eye damage/eye irritation, Category 2 H319

Full text of H statements : see section 16

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according to Regulation (EU) 2015/830

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) :

Warning

Hazard statements (CLP) :

H319 - Causes serious eye irritation

Precautionary statements (CLP) :

P264 - Wash hands, forearms and face thoroughly after handling
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337+P313 - If eye irritation persists: Get medical advice/attention

Security closing plug for children :

No

Tactile warning :

No

2.3. Other hazards

Adverse physicochemical, human health and environmental effects :

Causes serious eye irritation.

PBT: not relevant – no registration required

vPvB: not relevant – no registration required

SECTION 3: Composition/information on ingredients

3.1. Substance

Substance type :

Mono-constituent

Name :

Magnesium Nitrate Hexahydrate

CAS No :

13446-18-9

EC no :

233-826-7

Name	Product identifier	%
Magnesium Nitrate Hexahydrate	(CAS No) 13446-18-9 (EC no) 233-826-7 (REACH-no) 01-2119491164-38	> 90

Full text of H-statements: see section 16

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation :

Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact :

Wash skin with plenty of water.

First-aid measures after eye contact :

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion :

Call a poison center or a doctor if you feel unwell.

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

Symptoms/injuries after inhalation :

None known.

Symptoms/injuries after skin contact :

None known.

Symptoms/injuries after eye contact :

Eye irritation.

Symptoms/injuries after ingestion :

None known.

Symptoms/injuries upon intravenous administration :

Not expected to be a primary route of exposure.

Chronic symptoms :

None known.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media :

Water spray.

Unsuitable extinguishing media :

earth, sand, dry chemical powder or foam.

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5.2. Special hazards arising from the substance or mixture

Fire hazard	: No fire hazard.
Explosion hazard	: No direct explosion hazard.
Reactivity in case of fire	: Stable in use and storage conditions as recommended in item 7.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

5.3. Advice for firefighters

Precautionary measures fire	: Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to heat: have neighbourhood close doors and windows.
Firefighting instructions	: Dilute toxic gases with water spray.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information	: Standard protective clothing and equipment (Self Contained Breathing Apparatus) for fire fighters.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Ensure adequate ventilation. Avoid all eye and skin contact and do not breathe vapour and mist. Eliminate every possible source of ignition.
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6.1.1. For non-emergency personnel

Protective equipment	: Protective clothing.
Emergency procedures	: Ventilate spillage area. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
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6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment	: Contain leaking substance, pump over in suitable containers.
Methods for cleaning up	: Recover mechanically the product.
Other information	: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment. Keep only in the original container in a cool well ventilated place away from acids. Protect material from direct sunlight.
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store in a well-ventilated place. Keep cool. Store in original container.
Incompatible products	: Iron.
Storage temperature	: 0 - 30 °C
Heat and ignition sources	: Keep away from ignition sources.
Prohibitions on mixed storage	: Keep away from. Strong acids, strong bases and oxidation agents.
Storage area	: Store at ambient temperature. Store in a well-ventilated place.
Special rules on packaging	: meet the legal requirements. Store in a closed container. correctly labelled.
Packaging materials	: Polyethylene. polypropylene.

7.3. Specific end use(s)

Fertilizer.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Maganit (13446-18-9)

DNEL/DMEL (Workers)

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Maganit (13446-18-9)	
Acute - systemic effects, dermal	< mg/kg bodyweight/day
Long-term - systemic effects, dermal	20,8 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	36,7 mg/m ³
DNEL/DMEL (General population)	
Acute - systemic effects, dermal	<= mg/kg bodyweight
DNEL/DMEL (additional information)	
Additional information	The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace
PNEC (Water)	
PNEC aqua (freshwater)	0,45 mg/l
PNEC aqua (marine water)	0,045 mg/l
PNEC aqua (intermittent, freshwater)	4,5 mg/l
PNEC (STP)	
PNEC sewage treatment plant	18 mg/l

8.2. Exposure controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Personal protective equipment	: EN 374. safety goggles.
Hand protection	: Protective gloves
Eye protection	: Safety glasses
Skin and body protection	: Wear suitable protective clothing
Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment
Environmental exposure controls	: Avoid release to the environment. Local exhaust and general ventilation must be adequate to meet exposure standards.
Consumer exposure controls	: Do not eat, drink or smoke in areas where product is used.
Other information	: Use good personal hygiene practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: White solid.
Colour	: White.
Odour	: odourless.
Odour threshold	: No data available
pH	: 7 5% solution
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: 95 °C at 1013hPa
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable
Vapour pressure	: < 0,00001 Pa
Relative vapour density at 20 °C	: No data available
Relative density	: Not applicable
Density	: 1,46 g/cm ³
Solubility	: Water: 225 g/L
Log Pow	: -0,61
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available
Explosive properties	: Not explosive.
Oxidising properties	: ANHYDROUS FORM. May intensify fire; oxidiser.
Explosive limits	: Not applicable

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9.2. Other information

Minimum ignition energy : <=

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Maganit (13446-18-9)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 5000 mg/kg

Skin corrosion/irritation : Not classified
pH: 7 5% solution

Serious eye damage/irritation : Causes serious eye irritation.
pH: 7 5% solution

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Maganit (13446-18-9)	
NOAEL (oral, rat, 90 days)	> 1500 mg/kg bodyweight/day

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Ecology - water : there is no direct test for magnesium nitrate, the data were based on studies of similar substances.

Maganit (13446-18-9)	
LC50 fish 1	1378 mg/l
EC50 Daphnia 1	490 mg/l
EC50 72h algae (1)	1700 mg/l
ErC50 (algae)	> 1700 mg/l 10 d
NOEC (acute)	> 180 mg/l
TLM fish 1	<

12.2. Persistence and degradability

Maganit (13446-18-9)	
Persistence and degradability	degradable in water in anaerobic conditions.

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12.3. Bioaccumulative potential

Maganit (13446-18-9)	
Log Pow	-0,61
Bioaccumulative potential	Low bioaccumulation potential.

12.4. Mobility in soil

Maganit (13446-18-9)	
Ecology - soil	soluble in water.

12.5. Results of PBT and vPvB assessment

Maganit (13446-18-9)	
PBT: not relevant – no registration required	
vPvB: not relevant – no registration required	

12.6. Other adverse effects

Other adverse effects : No other effects known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Additional information : Non-hazardous waste.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable
Proper Shipping Name (ADN) : Not applicable
Proper Shipping Name (RID) : Not applicable

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

ADN

Transport hazard class(es) (ADN) : Not applicable

RID

Transport hazard class(es) (RID) : Not applicable

14.4. Packing group

Packing group (ADR) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable
Packing group (ADN) : Not applicable
Packing group (RID) : Not applicable

14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

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14.6. Special precautions for user

- Overland transport

No data available

- Transport by sea

No data available

- Air transport

No data available

- Inland waterway transport

No data available

- Rail transport

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Maganit is not on the REACH Candidate List

Maganit is not on the REACH Annex XIV List

15.1.2. National regulations

Germany

VwVwS Annex reference : Water hazard class (WGK) 1, low hazard to waters (Classification according to VwVwS, Annex 1 or 2; ID No. 363)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed

SZW-lijst van mutagene stoffen : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

Denmark

Classification remarks : Emergency management guidelines for the storage of flammable liquids must be followed

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Full text of H- and EUH-statements:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H319	Causes serious eye irritation

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product