

## 1 Identification of the substance/mixture and of the company/undertaking

**· Product identifier**

**· Trade name:** MAGNESIUM NITRATE HEXAHYDRATE

**· CAS Number:**  
13446-18-9

**· EC number:**  
233-826-7

**· Registration number**

Not available. The transition period under the REACH Regulation (Article 23) is not over.

**· Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.

**· Application of the substance / the preparation**  
Intermediate  
Industrial uses

**· Details of the supplier of the safety data sheet**

**· Manufacturer/Supplier:**

JINWANG EUROPE  
ZI Jean Jaurès  
218, Avenue Marie Curie  
07800 La Voulte Sur Rhone  
France

**· Further information obtainable from:** [emilie.bertin@jinwang.eu](mailto:emilie.bertin@jinwang.eu)

**· Emergency telephone number:**

England and Wales: +44 845 4647  
Germany : +49 30 192 40  
Austria : +43 1 406 43 43  
Belgium : +32 70 245 245  
Danemark : +45 82 12 12 12  
Spain : +34 156 20420  
France : +33 140 054 848  
Italy : +39 02 6610 1029  
Norway : +47 22 59 13 00  
Netherlands : +31 30 274 88 88  
Sweden : +46 8 33 12 31

## 2 Hazards identification

**· Classification of the substance or mixture**

**· Classification according to Regulation (EC) No 1272/2008**



GHS03 flame over circle

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



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

**· Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



**Xi; Irritant**

R36/37/38: Irritating to eyes, respiratory system and skin.



**O; Oxidising**

R8: Contact with combustible material may cause fire.

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· **Information concerning particular hazards for human and environment:** Not applicable.

· **Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

The substance is classified and labelled according to the CLP regulation.

· **Hazard pictograms**



GHS03 GHS07

· **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.

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

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

### 3 Composition/information on ingredients

· **Chemical characterization: Substances**

· **CAS No. Description**

13446-18-9 Magnesium Nitrate hexahydrate

· **Identification number(s)**

· **EC number:** 233-826-7

### 4 First aid measures

· **Description of first aid measures**

· **General information:** Immediately remove any clothing soiled by the product.

· **After inhalation:**

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:**

If skin irritation continues, consult a doctor.

Immediately wash with water and soap and rinse thoroughly.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:**

Do not induce vomiting; call for medical help immediately.

If symptoms persist consult doctor.

· **Information for doctor:**

· **Most important symptoms and effects, both acute and delayed** No further relevant information available.

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- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

## 5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture** Nitrogen oxides (NO<sub>x</sub>)
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.  
Not required.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Ensure adequate ventilation.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Open and handle receptacle with care.  
Keep away from heat and direct sunlight.
- **Information about fire - and explosion protection:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:**  
Store away from flammable substances.  
Not required.
- **Further information about storage conditions:**  
Store in cool, dry conditions in well sealed receptacles.  
Keep container tightly sealed.
- **Recommended storage temperature:** Storage temperature : Room temperature
- **Specific end use(s)** No further relevant information available.

## \* 8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists valid during the making were used as basis.

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· **Exposure controls**

· **Personal protective equipment:**

· **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 the eyes and skin.*

· **Respiratory protection:**

*In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.*



*Suitable respiratory protective device recommended.*

· **Protection of hands:**



*Protective gloves*

*The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.*

*Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.*

*Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation*

· **Material of gloves**

*The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.*

· **Penetration time of glove material**

*The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.*

· **Eye protection:**



*Tightly sealed goggles*

· **Body protection:**

*Protective work clothing*

*Use protective suit.*

**9 Physical and chemical properties**

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

**Form:** Crystalline

**Colour:** White

· **Odour:** Odourless

· **Odour threshold:** Not determined.

· **pH-value:** Not applicable.

· **Change in condition**

**Melting point/Melting range:** 89 °C

**Boiling point/Boiling range:** Undetermined.

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· <b>Flash point:</b>	Not applicable.
· <b>Flammability (solid, gaseous):</b>	Contact with combustible material may cause fire.
· <b>Ignition temperature:</b>	
<b>Decomposition temperature:</b>	333 °C
· <b>Self-igniting:</b>	Not determined.
· <b>Danger of explosion:</b>	Not determined.
· <b>Explosion limits:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
· <b>Vapour pressure:</b>	Not applicable.
· <b>Density at 20 °C:</b>	1.64 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not applicable.
· <b>Evaporation rate</b>	Not applicable.
· <b>Solubility in / Miscibility with water at 25 °C:</b>	420 g/l
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not applicable.
<b>Kinematic:</b>	Not applicable.
· <b>Solvent content:</b>	
<b>Organic solvents:</b>	0.0 %
<b>VOC (EC)</b>	0.00 %
<b>Solids content:</b>	100.0 %
· <b>Other information</b>	No further relevant information available.

## 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid**
  - Moist air
  - Heat
- **Incompatible materials:**
  - Oxidizing materials
  - Reducing agents
  - Combustible substances
- **Hazardous decomposition products:** Nitrogen oxides (NO<sub>x</sub>)

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## 11 Toxicological information

· **Information on toxicological effects**

· **Acute toxicity:**

· **LD/LC50 values relevant for classification:**

**13446-18-9 Magnesium Nitrate hexahydrate**

Oral LD50 5440 mg/kg (rat)

· **Primary irritant effect:**

· **on the skin:** Irritant to skin and mucous membranes.

· **on the eye:** Irritating effect.

· **Sensitization:** No sensitizing effects known.

· **Other information (about experimental toxicology):**

Mutagenicity: In vitro evaluation of NO (ICI Chemicals & Polymers Limited Runcorn Cheshire)

- Hamster cells V79

- E. coli K12

Carcinogenicity: NO

Reproductive Toxicity: NO

## 12 Ecological information

· **Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **Persistence and degradability** No further relevant information available.

· **Other information:** NOEL 400 mg / L (aquatic invertebrates: Polycells nigra)

· **Behaviour in environmental systems:**

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** Very soluble compartment ultimate Water

· **Additional ecological information:**

· **General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

· **Waste treatment methods**

· **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Discharge into drains or the environment prohibited. Waste disposal must be in accordance with the Regulations and Orders Prefectural into force. Although empty contaminated packaging, deliver to an approved disposal.

· **Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

· **UN-Number**

· **ADR, IMDG, IATA**

UN1474

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**Trade name: MAGNESIUM NITRATE HEXAHYDRATE**

· <b>UN proper shipping name</b>	
· <b>ADR</b>	1474 MAGNESIUM NITRATE
· <b>IMDG, IATA</b>	MAGNESIUM NITRATE

· <b>Transport hazard class(es)</b>	
· <b>ADR, IMDG, IATA</b>	



· <b>Class</b>	5.1 Oxidising substances.
· <b>Label</b>	5.1

· <b>Packing group</b>	
· <b>ADR, IMDG, IATA</b>	III

· <b>Environmental hazards:</b>	
· <b>Marine pollutant:</b>	No

· <b>Special precautions for user</b>	Warning: Oxidising substances.
· <b>Danger code (Kemler):</b>	50
· <b>EMS Number:</b>	F-A,S-Q

· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
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· **Transport/Additional information:**

· <b>ADR</b>	
· <b>Limited quantities (LQ)</b>	5 kg
· <b>Transport category</b>	3
· <b>Tunnel restriction code</b>	E

· <b>UN "Model Regulation":</b>	UN1474, MAGNESIUM NITRATE, 5.1, III
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### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations:**
- **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
ICAO: International Civil Aviation Organization  
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
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)  
VOC: Volatile Organic Compounds (USA, EU)  
LC50: Lethal concentration, 50 percent

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**Safety data sheet**  
**according to 1907/2006/EC, Article 31**

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*LD50: Lethal dose, 50 percent*

· **\* Data compared to the previous version altered.**

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