

MAGNESIUM NITRATE 6-HYDRATE

Section 1: Chemical Product and Company Identification

1.1 Product identifier

Product Name: Magnesium Nitrate 6-hydrate

Material No. 9045XXXXXXXXXX

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

Relevant identified uses: Technical

1.3 Details of the supplier of the safety data sheet

CHEMICAL ELEMENTS UKRAINE, LLC
Khimikov avenue, 74, Cherkassy, 18028, Ukraine
+38 0472 59 02 28
hello@chemelements.life
www.chemelements.life

1.4 Emergency telephone number

+49 40 333 13 237

Section 2: Hazards Identification

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union legislation.

2.2 Label elements

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Section 3: Composition and Information on Ingredients

3.1 Substance

Chemical name: Magnesium Nitrate 6-hydrate

Formula: $Mg(NO_3)_2 \cdot 6H_2O$

CAS No. 13446-18-9

EC No. 233-826-7

3.2 Mixture

Not applicable

Section 4: First Aid Measures

4.1 Description of first aid measures

Inhalation: Fresh air.

Ingestion: Immediately make victim drink water (two glasses at most). Consult a physician.

Skin: Take off immediately all contaminated clothing. Rinse skin with water/ shower

Eye contact: Rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: Nausea, vomiting, tiredness, methaemoglobinaemia with headache, cardiac arrhythmia, drop in blood pressure, dyspnoea, and spasms, key symptom: cyanosis (blue colouration of the blood).

4.3 Indication of any immediate medical attention and special treatment needed

No information available

Section 5: Fire fighting measures

5.1 Extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture

Not combustible. Ambient fire may liberate hazardous vapours. Fire may cause evolution of: nitrous gases, nitrogen oxides.

5.3 Advice for firefighters

In a fire situation, wear self-contained positive pressure breathing apparatus and protective clothing from resistant materials.

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid inhalation and ingestion. Avoid contact with skin, eyes and clothing. Wear protective clothing specified for normal operations (see Section 8).

6.2 Environmental precautions

Avoid release to the environment.

6.3 Methods and materials for containment and cleaning up

Substance collect in a closed identified container, using a dry method. Avoid dust. Rinse contaminated surface with detergent and water.

6.4 Reference to other sections

Disposal (see Section 13).

Section 7: Handling and Storage

7.1 Precautions for safe handling

Change contaminated clothing immediately; wash hands and face after handling.

7.2 Conditions for safe storage, including any incompatibilities

Store in a dry warehouse in the original tightly closed packaging. Avoid exposure to moisture.

7.3 Specific end use(s)

Technical.

Section 8: Exposure Controls/Personal Protection

8.1 Control parameters

Provide adequate ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits. The level of protection and types of controls will vary depending upon potential exposure conditions.

8.2 Exposure controls

Eye/face protection:	Safety goggles
Skin and body protection:	Wear protective clothing (protective gloves, dustproof clothing and special footwear). Recommended Glove material: Nitrile rubber 0,11 mm.
Respiratory Protection:	Respiratory protection necessary at: Dust formation. Recommended Filter type: Filter P1.

Section 9: Physical and Chemical Properties

Form:	Solid
Appearance:	Colorless crystals
Odour:	Odourless.
Melting Point:	89°C
Boiling point:	Not applicable
Decomposition temperature:	>90°C (Elimination of water of crystallisation), 330°C.
Solubility in Water:	2320 g/l (15°C)
Solubility in Organic Solvents:	No information available
Specific Gravity:	1,46 g/cm ³ (20°C)

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pH:	3,9-7 (5% solution, 20°C, H ₂ O)
Flammability:	No information available
Molecular Weight:	256,40
Partition coefficient: n-octanol/water:	No information available
Vapor pressure:	No information available

Section 10: Stability and Reactivity Data

10.1 Reactivity

No information available

10.2 Chemical stability

Releases water of crystallisation when heated. The product is chemically stable under standard ambient conditions (room temperature). Hygroscopic.

10.3 Possibility of hazardous reactions

Risk of explosion with esters. Risk of ignition or formation of inflammable gases or vapours with organic combustible substances, oxidisable substances, Strong acids, Powdered metals, phosphorus. Exothermic reaction with Dimethylformamide, Reducing agents.

10.4 Conditions to avoid

Strong heating (decomposition)

10.5 Incompatible materials

Strong acids. Strong reducing agents. Organic materials. Powdered metals.

10.6 Hazardous decomposition products

See 5.2

Section 11: Toxicological Information

Acute Toxicity:	LD ₅₀ =5440 mg/kg (rat, oral).
Inhalation:	Yes (mucosal irritations, Cough, Shortness of breath, possible damages of respiratory tract)
Skin:	Yes (rabbit, slight irritation)
Eye:	Yes (rabbit, slight irritation)
Carcinogenicity:	No information available
Mutagenicity:	No information available
Reproductive toxicity:	No information available
Specific target organ toxicity - single exposure:	No information available
Specific target organ toxicity - repeated exposure:	No information available
Aspiration hazard:	No information available
Systemic effects:	See 4.2

Section 12: Ecological Information

12.1 Acute toxicity

No information available

12.2. Persistence and degradability

No information available

12.3 Bioaccumulative potential

Not applicable

12.4. Mobility in soil

The product is water soluble, and may spread in water systems Will likely be mobile in the environment due to its water solubility. Highly mobile in soils

12.5 Results of PBT and vPvB assessment

Not applicable for inorganic substances

12.6 Other adverse effects

Endangers drinking-water supplies if allowed to enter soil or water. Discharge into the environment must be avoided.

Section 13: Disposal Considerations

Whatever cannot be saved for recovery or recycling should be disposed of according to relevant local, state and federal government regulations.

Section 14: Transport Information

14.1 UN number

Not dangerous goods

14.2 UN proper shipping name

Not dangerous goods

14.3 Transport hazard class(es)

Land transport (ADR/RID): Not classified as dangerous in the meaning of transport regulations

Air transport (IATA): Not classified as dangerous in the meaning of transport regulations

Sea transport (IMDG): Not classified as dangerous in the meaning of transport regulations

14.4 Packaging group:

Not dangerous goods

14.5 Environmental hazards

Not dangerous goods

Section 15: Other Regulatory Information

Chemical Safety Assessment: No information

Section 16: Other Information

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