

0. General

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Based on: REACH Regulation EC 1907/2006 and Commission Regulation EU 2015/830

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Magnesium chloride solution
This SDS is valid for all forms of magnesium chloride solutions

Product name: MgCl₂ tech, MgCl₂ feed, nedMag C® Magnesium chloride liquid
Chemical name/ synonyms: Magnesium chloride, MgCl₂
REACH registration number: not applicable, product exempted from REACH registration (Annex V) as natural mineral not modified chemically
CAS-number: 7786-30-3
EC-number: 232-094-6
Index number CLP Annex VI: not classified

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

Most common uses for Magnesium chloride liquid are: raw material for industrial applications such as oxychloride cement, drilling fluids, textiles, sponges, detergents, animal feed, de-icing, dust-control.

No uses advised against are identified.

1.3 Details of the supplier of the safety data sheet

Name: NEDMAG B.V.
Address: Billitonweg 1, P.O. Box 241
9640 AE Veendam, the Netherlands
Telephone: +31 598 651 911
Fax: +31 598 651 205
E-mail: sds@nedmag.nl

1.4. Emergency telephone number

UK: NHS Direct for Health Advice and Reassurance, 24 hours a day, 365 days a year
Telephone +44 (0)845 46 47, www.nhsdirect.nhs.uk

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

According to Regulation (EC) No. 1278/2008 (CLP):
Not classified.

2.2 Label elements

According to CLP regulation:

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Magnesium chloride liquid

GHS hazard pictogram: No pictogram
 Signal word: No signal word
 Hazard statement: None
 Precautionary statements: None

Other labels:

None

2.3 Other hazards

None

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

Constituent	EC-number	CAS-number	Concentration w/w	Classification Regulation (EC) No. 1278/2008
Magnesium chloride (MgCl ₂)	232-094-6	7786-30-3	30-33 %	None
Water	231-791-2	7732-18-5		None

Magnesium chloride liquid is a solution of inorganic salts in water

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation: Remove to fresh air.

Skin contact: Wash with plenty of soap and water.

Eye contact: Remove contact lenses. Rinse copiously with water for at least 10-15 minutes. If eye irritation persists, get medical advice and (if needed) medical attention.

Ingestion: Rinse mouth and drink plenty of water afterwards. Do not induce vomiting. In case large quantities have been swallowed, get medical advice.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation: Respiratory tract irritation

Skin contact: Irritation

Eye contact: Irritation

Ingestion: If large quantities are swallowed, rarely irritation, nausea and gastrointestinal upset may occur.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media



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Magnesium chloride liquid

Magnesium chloride is not combustible. Choose extinguishing media depending on surrounding conditions. All extinguishing media are allowed.

5.2 Special hazards arising from the substance or the mixture

No special hazards.

5.3 Advise for fire fighters

Protective actions and/or special protective equipment depending on surrounding conditions. Use protective clothing and self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with eyes and skin. Use personal protection (see section 8).

6.2 Environmental precautions

Environmental precaution: Prevent uncontrolled discharges into the environment (rivers, water courses, sewers etc.).

Clean-up procedure: Absorb spilt product with sand or other inert material and flush remnant away with water.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

- Avoid contact with eyes and skin.
- Ensure suitable personal protection equipment (see section 8)
- Do not eat, drink or smoke when handling the product.
- Wash hands after finishing working with the product.

7.2 Conditions for safe storage, including any incompatibilities

- Store in open or closed storage tanks
- Suitable materials for storage are polyester, polyethylene and polypropylene
- Avoid contact with metals because of possible corrosion
- Protect from humidity and water
- Protect from heat and direct sunlight

7.3 Specific end use(s)

No specific end uses

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Exposure limits: Not determined

8.2 Exposure controls

Appropriate Engineering Controls: No special precautions required.

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Magnesium chloride liquid

Respiratory protection:	No special protective equipment required.
Hand protection:	Wear protective (butyl) rubber gloves. Use a high fat protective cream after cleaning skin.
Eye protection:	Safety glasses with side shields.
Skin and body protection:	Wear protective clothing.
Hygienic measures:	When using do not eat, drink or smoke.
Protective measures:	Avoid contact with eyes, skin and clothing.
Environmental exposure controls:	Prevent the material from entering rivers, water courses and sewers.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	Liquid
Colour:	Colourless to light yellow
Odour:	Odourless
pH:	4-6
*Melting point/range:	Not applicable
*Boiling point/range:	117-118°C (1 atm)
Flash point:	Not applicable
Flammability:	Not flammable
Auto-flammability:	Not applicable
Explosion hazards:	Not explosive
Combustive properties:	Not combustible
Vapour pressure:	Effectively zero
Vapour density:	Not applicable (not volatile)
Relative density:	1290-1330 g/l
*Solubility(ies):	Not applicable
Partition coefficient:	
n-octanol/water:	Not applicable
Auto ignition temperature:	None
Ignition temperature:	Not applicable
Viscosity:	Not determined
Explosive properties:	None
Oxidizing properties:	None. The product can facilitate corrosion of steel.

9.2 Other information

Not applicable

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Not applicable.

10.2 Chemical stability

Magnesium chloride is stable under normal conditions.

10.3 Possibility of hazardous reactions

No dangerous reactions known under conditions of normal use.

10.4 Conditions to avoid

None known.

10.5 Incompatible materials

Avoid oxidizing agents. In contact with metals corrosion can occur.

10.6 Hazardous decomposition products

No decomposition is used as directed. If Magnesium chloride is heated above 180°C harmful vapours can develop (hydrochloric acid). Above 300°C toxic chloride vapours are formed.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Classification: Magnesium chloride was not classified according to Council Regulation 1272/2008/EC

Acute toxicity:

By Oral route: Rat, Oral, LD50: 8100 mg/kg

By Inhalation: No data available.

Chronic toxicity:

Germ cell mutagenicity: No known studies. Not considered to be mutagenic in general.

Carcinogenicity: Substance is not classified as carcinogenic under ACGIH, NIOSH, IARC, NTP or OSHA.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Magnesium chloride is an inorganic naturally occurring product that will not accumulate quickly in the environment under normal conditions of use. Significantly higher chloride concentrations in the soil and groundwater can harm plants and other vegetation.

12.2 Persistence and degradability

Not applicable for inorganic substances.

12.3 Bioaccumulation potential

Bioaccumulation is unlikely: inorganic substance.

12.4 Mobility in soil

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Magnesium chloride easily dissolves in water. Dependent on the pH and the ions available in natural surface water it can be involved in precipitation reactions (for example as magnesium sulphate).

12.5 Results of PBT and vPvB assessment

Magnesium chloride is not classified as PBT or vPvB substance

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of substance in suitable containers in accordance with local, regional, national or international regulation. Do not dispose of in waterways or together with household waste.

SECTION 14: TRANSPORT INFORMATION

14.1	UN number:	not applicable
14.2	UN proper shipping name:	not applicable
14.3	Transport hazard class(es):	not applicable
14.4	Packing group:	not applicable
14.5	Environmental hazards:	not applicable
14.6	Special precautions for users:	not applicable
14.7	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:	applicable, category Z

SECTION 15: REGULATORY INFORMATION

- Not classified as dangerous according to Council Directive 1272/2008/EC
- Substance exempted from Regulation 1907/2006 (REACH): Annex V, paragraph 10.

SECTION 16: OTHER INFORMATION

Revision of this safety data sheet

This safety data sheet supersedes all previous issues.