

0. General

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Date of issue: 18-12-2012
Supersedes version: Version 1.0, 30-07-2008
Based on: REACH Regulation EC 1907/2006 and Commission Regulation EU 453/2010

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**1.1 Product identifier**

Magnesium chloride flakes/pellets

Product name: Magnesium chloride flakes/pellets Chemical
name/ synonyms: Magnesium chloride hexahydrate, $MgCl_2 \cdot 6H_2O$
REACH registration number: not applicable, product exempted from REACH registration (Annex V) as natural mineral not modified chemically
CAS-number: 7791-18-6
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 flakes/pellets are: raw material for industrial applications such as oxychloride cement, drilling fluids, textiles, sponges, detergents, animal feed, de-icing, dust-control, paramedical/cosmetic products.

No uses advised against are identified.

1.3 Details of the supplier of the safety data sheet

Name: Intra-Laboratories Ltd
Address: Unit 8, Devonshire Meadows, Plymouth, Devon PL6 7EZ
Telephone: 01752 724109
Fax:
E-mail: admin@intralabs.co.uk

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.

According to Directive 67/548/EEC:

Not classified.

2.2 Label elements

According to CLP regulation:

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 hexahydrate (MgCl ₂ -6H ₂ O)	232-094-6	7791-18-6	100 %	None

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation: In case of dust inhalation or breathing fumes released from heated material, remove person to fresh air. Apply artificial respiration if necessary and get medical attention.

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

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: Carefully scoop up spilt product 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.
- Do not inhale dust.
- Avoid dust formation and ensure sufficient ventilation or extraction in the work area.

7.2 Conditions for safe storage, including any incompatibilities

- Keep packaging tightly sealed.
- Store in a dry area.
- 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: Good general ventilation.

Respiratory protection: Under normal circumstances, no special protective equipment required. In case of significant or accidental dust or fumes emissions, dust mask should be worn.

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: Solid flakes or half spheres

Colour: White to pale yellow/grey

Odour: Odourless

pH: ca. 8.5 (aqueous solution 10%)

Melting point/range: ca. 118°C

Boiling point/range: ca. 116°C

Flash point: Not applicable

Flammability: Not flammable

Auto-flammability: Not applicable

Explosion hazards: Not explosive

Combustive properties: Not combustible

Vapour pressure: Not applicable

Vapour density: Not applicable (not volatile)

Relative density: Bulk density 800-900 kg/m³

Solubility(ies): Soluble in water and alcohol

Partition coefficient:

n-octanol/water: Viscosity:

Auto ignition temperature: Explosive properties:

Ignition temperature:

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Magnesium chloride flakes/pellets

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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 Directive 67/548/EEC or 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

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Magnesium chloride flakes/pellets

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

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:	not applicable

SECTION 15: REGULATORY INFORMATION

- Not classified as dangerous according to Council Directive 67/548/EEC
- Not classified as dangerous according to Council Directive 1272/2008/EC
- Substance exempted from Regulation 1907/2006 (REACH): Annex V, paragraph 10.
- Other relevant legislation: 1999/45/EC, 2001/58/EC, 2006/58/EC (30 ATP), 2006/8/EC

SECTION 16: OTHER INFORMATION

Revision of this safety data sheet

SAFETY DATASHEET
Magnesium chloride flakes/pellets

This safety data sheet is fully revised according to the CLP and REACH regulations. This safety data sheet supersedes all previous issues.