

## Magnesium chloride, hexahydrate

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2015/830

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

### 1.1 Product identifier

Product name : Magnesium chloride, hexahydrate  
Chemical name : Magnesium chloride (MgCl<sub>2</sub>), hexahydrate  
EC number : 232-094-6  
CAS number : 7791-18-6  
REACH Registration number : Not available.  
Other means of identification : Magnesium chloride, hexahydrate; Magnesium chloride hexahydrate  
Chemical formula : Cl<sub>2</sub>-Mg.6H<sub>2</sub>-O

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

Industrial use, removal of ice from the surface in winter.

### 1.3 Details of the supplier of the safety data sheet

distripark.com sp. z o.o., Sienkiewicza 4, 56-120 Brzeg Dolny, Poland

Telephone: +48 71 794 3733

E-mail adress: sklep@distripark.com

### 1.4 Emergency telephone number

#### National advisory body/Poison Center

Telephone number : Not available.

#### Supplier

Telephone number : Telephone: +48 71 794 2555, +48 71 794 2441 (available 24h/day) or +48 71 794 2690 (fax) at PCC Rokita SA or the closest local Fire Brigade

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Product definition : Mono-constituent substance

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

Not classified.

See Section 11 for more detailed information on health effects and symptoms.

### 2.2 Label elements

Hazard pictograms : Not applicable.

Signal word : Not applicable.

Hazard statements : Not applicable.

#### Precautionary statements

General : Not applicable.

Prevention : Not applicable.

Response : Not applicable.

Storage : Not applicable.

**Disposal** : Not applicable.  
**Supplemental label elements** : Not applicable.

### 2.3 Other hazards

**Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII** : Not applicable.  
**Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII** : Not applicable.  
**Other hazards which do not result in classification** : None known.

## SECTION 3: Composition/information on ingredients

**3.1 Substance** : Mono-constituent substance

Substance	Identifiers	%	Classification	Type
			Regulation (EC) No. 1272/2008 [CLP/GHS]	
Magnesium chloride (MgCl <sub>2</sub> ), hexahydrate	EC: 232-094-6 CAS: 7791-18-6	50	Not classified.	[A]

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

#### Type

[A] Constituent  
[B] Impurity  
[C] Stabilizing additive

Occupational exposure limits, if available, are listed in Section 8.

**3.2 Mixture** : Not applicable.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

**Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.  
**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.  
**Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.  
**Ingestion** : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.  
**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

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

#### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : No known significant effects or critical hazards.  
**Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

**Eye contact** : No specific data.  
**Inhalation** : No specific data.

- Skin contact** : No specific data.  
**Ingestion** : No specific data.

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

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.  
**Specific treatments** : No specific treatment.

## SECTION 5: Firefighting measures

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### 5.1 Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

- Unsuitable extinguishing media** : None known.

### 5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : No specific fire or explosion hazard.  
**Hazardous combustion products** : Decomposition products may include the following materials:  
halogenated compounds  
metal oxide/oxides

### 5.3 Advice for firefighters

- Special precautions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.  
**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## SECTION 6: Accidental release measures

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### 6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.  
**For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- 6.2 Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

- 6.3 Methods and materials for containment and cleaning up** : Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

- 6.4 Reference to other sections** : See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

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The information in this section contains generic advice and guidance.

### 7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8).
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

### 7.3 Specific end use(s)

- Recommendations** : Not available.
- Industrial sector specific solutions** : Not available.

## SECTION 8: Exposure controls/personal protection

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The information in this section contains generic advice and guidance.

### 8.1 Control parameters

#### Occupational exposure limits

Not established exposure limit value.

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### Derived effect levels

No DELs available.

#### Predicted effect concentrations

No PECs available.

### 8.2 Exposure controls

- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

#### Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical product, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Wear suitable gloves tested to EN374.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

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### 9.1 Information on basic physical and chemical properties

#### Appearance

- Physical state** : Solid.
- Color** : White.
- Odor** : Odorless.
- Odor threshold** : Not available.
- pH** : 8,4 (270 g/l)
- Melting point/freezing point** : 118°C
- Initial boiling point and boiling range** : 1411°C
- Flash point** : Not available.
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Upper/lower flammability or explosive limits** : Not available.
- Vapor pressure** : Not available.
- Vapor density** : Not available.
- Density** : Not available.
- Relative density** : Not available.
- Solubility(ies)** : Easily soluble in the following materials: cold water and hot water.
- Solubility in water at room temperature (g/l)** : Not available.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Not available.
- Explosive properties** : Not available.
- Oxidizing properties** : Not available.
- Additional information** : Bulk density kg/m<sup>3</sup> 800-900

### 9.2 Other information

No additional information.

Note: Integers (i.e. 3 or 7) should be read as decimals (3.0 or 7.0)

## SECTION 10: Stability and reactivity

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- 10.1 Reactivity** : Will corrode a wide variety of metals.
- 10.2 Chemical stability** : The product is stable.
- 10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- 10.4 Conditions to avoid** : Moisture, water, high temperature
- 10.5 Incompatible materials** : Strong acids, oxidizing agents, metals.
- 10.6 Hazardous decomposition products** : At temperatures above 135 ° C, hydrogen chloride gas may be released during decomposition. At temperatures above 300 ° C, chlorine may be released during decomposition.

## SECTION 11: Toxicological information

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### 11.1 Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Magnesium chloride (MgCl <sub>2</sub> ), hexahydrate	LD50 Oral	Rat	7333,3 mg/kg	-
	LD50 Oral	Rat	8100 mg/kg	-

**Conclusion/Summary** : No additional information.

#### Irritation/Corrosion

**Conclusion/Summary** : Not available.

#### Sensitizer

**Conclusion/Summary** : Not available.

#### Mutagenicity

**Conclusion/Summary** : Not available.

#### Carcinogenicity

**Conclusion/Summary** : Not available.

#### Reproductive toxicity

**Conclusion/Summary** : Not available.

#### Specific target organ toxicity (single exposure)

Not available.

#### Specific target organ toxicity (repeated exposure)

Not available.

#### Aspiration hazard

Not available.

#### Potential acute health effects

**Inhalation** : No known significant effects or critical hazards.

**Ingestion** : No known significant effects or critical hazards.

**Skin contact** : No known significant effects or critical hazards.

**Eye contact** : No known significant effects or critical hazards.

#### Symptoms related to the physical, chemical and toxicological characteristics

**Inhalation** : No specific data.

**Ingestion** : No specific data.

Skin contact : No specific data.

Eye contact : No specific data.

#### **Delayed and immediate effects and also chronic effects from short and long term exposure**

##### **Short term exposure**

Potential immediate effects : Not available.

Potential delayed effects : Not available.

##### **Long term exposure**

Potential immediate effects : Not available.

Potential delayed effects : Not available.

## **SECTION 12: Ecological information**

### **12.1 Toxicity**

<b>Product/ingredient name</b>	<b>Result</b>	<b>Species</b>	<b>Exposure</b>
Magnesium chloride (MgCl <sub>2</sub> ), hexahydrate	Acute EC50 4680 mg/l	Algae	72 hours
	Acute EC50 2980 mg/l	Daphnia	24 hours
	Acute EC50 77200 mg/l	Micro-organism	30 minutes
	Acute IC50 16350 mg/l	Fish	24 hours

Conclusion/Summary : No known significant effects or critical hazards.

### **12.2 Persistence and degradability**

Conclusion/Summary : Not available.

### **12.3 Bioaccumulative potential**

Not applicable.

### **12.4 Mobility in soil**

Soil/water partition coefficient (K<sub>oc</sub>) : Not available.

Mobility : Not available.

### **12.5 Results of PBT and vPvB assessment**

PBT : Not applicable.  
P: Not available. B: Not available. T: Not available.

vPvB : Not applicable.  
vP: Not available. vB: Not available.

12.6 Other adverse effects : No known significant effects or critical hazards.

## **SECTION 13: Disposal considerations**

### **13.1 Waste treatment methods**

#### **Product**

**Methods of disposal** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional or local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

**Hazardous waste** : Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 2008/98/EC.

#### **European waste catalogue (EWC)**

Waste code	Waste designation
16 03 04	inorganic wastes other than those mentioned in 16 03 03

### **Packaging**

**Methods of disposal** : The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Type of packaging	European waste catalogue (EWC)
Bag	15 01 02 plastic packaging
Pail	15 01 02 plastic packaging

**Special precautions** : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## **SECTION 14: Transport information**

### **International transport regulations**

This product is not regulated for carriage according to ADR/RID, ADN, IMDG, ICAO/IATA.

## **SECTION 15: Regulatory information**

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

REGULATION (EC) NO 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

The European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)

Regulations concerning the International Carriage of Dangerous Goods by Rail (RID) constituting Appendix C to the Convention concerning International Carriage by Rail (COTIF)

International Maritime Dangerous Goods Code (IMDG CODE)

IATA /International Air Transport Association/ Dangerous Goods Regulations (IATA DGR)

Ordinance of the Minister of Labour and Social Policy of 12 June 2018 concerning maximum permissible concentrations and intensities of agents harmful to health in a work environment (Journal of Laws 2018 item 1286).

Act on Waste of 14 December 2012 (Dz. U. /Journal of Laws/ of 2013, No. 0, item 21)

Act on Packaging and Packaging Waste Management of 13 June 2013 (Dz. U. /Journal of Laws/ of 2013, No. 0, item 888)

Act on Chemical Substances and Their Mixtures of 25 February 2011 (Dz. U. /Journal of Laws/ No. 63, item 322)

Regulation of the Minister of Labour and Social Policy on the general occupational health and safety regulations of 26 September 1997 (Dz. U. /Journal of Laws/ of 2003, No. 169, item 1650 as amended)

### **Annex XIV - List of substances subject to authorization**

#### **Annex XIV**

None of the components are listed.

#### **Substances of very high concern**

None of the components are listed.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Not applicable.

### **Other EU regulations**

**Europe inventory** : This material is listed or exempted.

**Priority List Chemicals** : Not determined

### **Seveso Directive**

This product is not controlled under the Seveso Directive.



15.2 Chemical Safety Assessment : Not available.

## SECTION 16: Other information

- Changes to the Safety Data Sheet** : Not applicable. The card of this product has been prepared on the basis of the manufacturer's safety data sheet.
- Training advice** : Ensure operatives are trained to minimise exposures.
- Abbreviations and acronyms** :  
ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway  
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road  
ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
CAS = Chemical Abstracts Service  
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]  
CMR = Carcinogen, Mutagen or Reproductive toxicant  
CSA = Chemical Safety Assessment  
CSR = Chemical Safety Report  
DNEL = Derived No Effect Level  
EC number = EINECS or ELINCS number  
EC50 = Half maximal effective concentration  
ES = Exposure Scenario  
EUH statement = CLP-specific Hazard statement  
EWC = European Waste Catalogue  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals H statement = CLP/GHS Hazard statement  
IATA = International Air Transport Association  
IC50 = Half maximal inhibitory concentration  
IMDG = International Maritime Dangerous Goods  
LC50 = Median lethal concentration  
LD50 = Median lethal dose  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
OECD = Organisation for Economic Co-operation and Development  
PBT = Persistent, Bioaccumulative and Toxic  
PNEC = Predicted No Effect Concentration  
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006]  
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail  
RRN = REACH Registration Number  
STOT = Specific Target Organ Toxicity  
SVHC = Substances of Very High Concern  
VOC = Volatile Organic Compound  
vPvB = Very Persistent and Very Bioaccumulative

### Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Not classified.	

**Full text of abbreviated H statements** : Not applicable.

**Full text of classifications [CLP/GHS]** : Not applicable.

#### Notice to reader

The information contained herein is accurate to the latest knowledge and describes the product from the point of view of help and environmental protection as well as safe handling. The information presented in this SDS refers to the technical product only and will not apply to any processed product. Final determination of the suitability of any materials for the chosen application(s) is the sole responsibility of the user"