



# Safety data sheet

according to Regulation (EC) No. 1907/2006



Printing date 21.09.2011

Version number 1

Revision: 21.09.2011

**Trade name: Magnesium chloride hexahydrate ≥99 %, p.a., ACS**

(Contd. of page 1)

- **After swallowing:**  
Rinse out mouth and drink a glass of water. Do not induce vomiting.  
If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

## 5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Wear fully protective suit.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Avoid formation of dust.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Pick up mechanically.  
Dispose of the material collected according to regulations.
- **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** Handling corresponding to laboratory safety guidelines.
- **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:** No special requirements.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** None.
- **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.
- **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.

(Contd. on page 3)

**Trade name: Magnesium chloride hexahydrate ≥99 %, p.a., ACS**

(Contd. of page 2)

Avoid contact with the eyes and skin.

· **Respiratory protection:** Required when dusts are generated.

· **Protection of hands:**



Protective gloves

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

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

· **Material of gloves**

Latex with chloroprene, thickness: 0,6 mm

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**

Value for the permeation: Level ≥ 6

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

## 9 Physical and chemical properties

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

· **General Information**

· **Appearance:**

Form: Solid

Colour: Whitish

· **Odour:** Odourless

· **Odour threshold:** Not determined.

· **pH-value (50 g/l) at 20°C:** 4.5-7.0

· **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Undetermined.

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Product is not flammable.

· **Ignition temperature:**

Decomposition temperature: > 117 °C (release of crystalline water)

· **Self-igniting:** Not determined.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

Lower: Not determined.

Upper: Not determined.

· **Vapour pressure:** Not applicable.

· **Density at 20°C:** 1.57 g/cm<sup>3</sup>

· **Relative density** Not determined.

· **Vapour density** Not applicable.

· **Evaporation rate** Not applicable.

(Contd. on page 4)



**Trade name: Magnesium chloride hexahydrate ≥99 %, p.a., ACS**

(Contd. of page 3)

- **Solubility in / Miscibility with water at 20°C:** 1670 g/l
- **Segregation coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
  - **Dynamic:** Not applicable.
  - **Kinematic:** Not applicable.
- **Other information** No further relevant information available.

## 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions** No information available.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No information available.
- **Hazardous decomposition products:** No information available.

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values relevant for classification:**
  - Oral LD50 8100 mg/kg (rat)
- **Primary irritant effect:**
  - **on the skin:** Slight irritations.
  - **on the eye:** Slight irritations
  - **after inhalation:** Slight irritations.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
  - After swallowing nausea and vomiting.
  - After absorption of large quantities: respiratory paralysis, cardiovascular failure.
  - Systemic effects: drop in blood pressure, cardiac dysrhythmia, muscular weakness, tiredness.
  - When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.
  - The substance is not subject to classification according to the latest version of the EU lists.
- **Further information:** The product should be handled with the care usual when dealing with chemicals.

## 12 Ecological information

- **Toxicity**
- **Acquatic toxicity:**
- **Fish toxicity:**
  - LC50 2120 mg/l/96 h (Pimephales promelas)
- **Daphnia toxicity:**
  - EC50 1400 mg/l/48 h (Daphnia magna)
- **Algal toxicity:**
  - IC50 2200 mg/l/72 h (Desmodesmus subspicatus)
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxic effects:**
- **Remark:** Do not allow to enter waters, waste water, or soil!

(Contd. on page 5)

# Safety data sheet

according to Regulation (EC) No. 1907/2006



Printing date 21.09.2011

Version number 1

Revision: 21.09.2011

**Trade name: Magnesium chloride hexahydrate ≥99 %, p.a., ACS**

(Contd. of page 4)

- **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**  
The disposal is regionally differently regulated, therefore the kind of disposal is to be inquired at the responsible authorities.
- **Uncleaned packaging:**
- **Recommendation:** Disposal according to official regulations.

## 14 Transport information

- **UN-Number**
  - **ADR, ADN, IMDG, IATA** Void
  - **UN proper shipping name**
  - **ADR, ADN, IMDG, IATA** Void
  - **Transport hazard class(es)**
  - **ADR, ADN, IMDG, IATA**
  - **Class** Void
  - **Packing group**
  - **ADR, IMDG, IATA** Void
  - **Environmental hazards:**
  - **Marine pollutant:** No
  - **Special precautions for user** Not applicable.
  - **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.
  - **Transport/Additional information:**
- 
- **ADR**
  - **Remarks:** Not subject to transport regulations.
  - **UN "Model Regulation":** -

## 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.

- **Department issuing MSDS:** Department: Health, Safety and Environment
- **Contact:** Herr Dr. Hagel
- **Abbreviations and acronyms:**  
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
IMDG: International Maritime Code for Dangerous Goods

(Contd. on page 6)

**Safety data sheet**  
according to Regulation (EC) No. 1907/2006



Printing date 21.09.2011

Version number 1

Revision: 21.09.2011

**Trade name: Magnesium chloride hexahydrate  $\geq 99$  %, p.a., ACS**

(Contd. of page 5)

IATA: International Air Transport Association  
ICAO: International Civil Aviation Organization  
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)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent

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

GB