

SAFETY DATA SHEET

Creation Date 22-Jun-2009

Revision Date 25-May-2017

Revision Number 3

1. Identification

Product Name Magnesium chloride, anhydrous

Cat No. : AC223210000; AC223210010; AC223210025; AC223210250;
AC223211000

Synonyms No information available

Recommended Use Laboratory chemicals.

Uses advised against Not for food, drug, pesticide or biocidal product use

Details of the supplier of the safety data sheet

Company

Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

Emergency Telephone Number

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11
Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99
CHEMTREC Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

2. Hazard(s) identification

Classification

Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Based on available data, the classification criteria are not met

Label Elements

None required

Hazards not otherwise classified (HNOC)

None identified

3. Composition / information on ingredients

| Component | CAS-No | Weight % |
|--------------------|-----------|----------|
| Magnesium chloride | 7786-30-3 | >95 |

4. First-aid measures

General Advice

If symptoms persist, call a physician. Show this safety data sheet to the doctor in

| | |
|---|---|
| | attendance. |
| Eye Contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention. |
| Skin Contact | Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur. |
| Inhalation | Move to fresh air. Get medical attention immediately if symptoms occur. |
| Ingestion | Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur. |
| Most important symptoms/effects Notes to Physician | None reasonably foreseeable. Treat symptomatically |

5. Fire-fighting measures

| | |
|---|--------------------------|
| Unsuitable Extinguishing Media | No information available |
| Flash Point | No information available |
| Method - | No information available |
| Autoignition Temperature | |
| Explosion Limits | |
| Upper | No data available |
| Lower | No data available |
| Sensitivity to Mechanical Impact | No information available |
| Sensitivity to Static Discharge | No information available |

Specific Hazards Arising from the Chemical

Reacts violently with water. Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous Combustion Products

Magnesium oxides Hydrogen chloride gas

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

| | | | |
|---------------|---------------------|--------------------|-------------------------|
| Health | Flammability | Instability | Physical hazards |
| 1 | 0 | 1 | N/A |

6. Accidental release measures

| | |
|---|--|
| Personal Precautions | Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation. |
| Environmental Precautions | Should not be released into the environment. See Section 12 for additional ecological information. |
| Methods for Containment and Clean Up | Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation. |

7. Handling and storage

| | |
|-----------------|--|
| Handling | Wear personal protective equipment. Ensure adequate ventilation. Avoid ingestion and inhalation. Avoid contact with skin, eyes and clothing. Avoid dust formation. |
| Storage | Keep containers tightly closed in a dry, cool and well-ventilated place. Store under an inert atmosphere. |

8. Exposure controls / personal protection

| | |
|---|---|
| <u>Exposure Guidelines</u> | This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies. |
| Engineering Measures | Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas. |
| <u>Personal Protective Equipment</u> | |
| Eye/face Protection | Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Tightly fitting safety goggles. |
| Skin and body protection | Long sleeved clothing. Impervious gloves. |
| Respiratory Protection | Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. |
| Hygiene Measures | Handle in accordance with good industrial hygiene and safety practice. When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. |

9. Physical and chemical properties

| | |
|---|--------------------------------|
| Physical State | Solid |
| Appearance | White |
| Odor | Odorless |
| Odor Threshold | No information available |
| pH | No information available |
| Melting Point/Range | 708 °C / 1306.4 °F |
| Boiling Point/Range | 1412 °C / 2573.6 °F @ 760 mmHg |
| Flash Point | No information available |
| Evaporation Rate | Not applicable |
| Flammability (solid,gas) | No information available |
| Flammability or explosive limits | |
| Upper | No data available |
| Lower | No data available |
| Vapor Pressure | No information available |
| Vapor Density | Not applicable |
| Specific Gravity | No information available |
| Solubility | Soluble in water |
| Partition coefficient; n-octanol/water | No data available |
| Autoignition Temperature | |
| Decomposition Temperature | No information available |
| Viscosity | Not applicable |
| Molecular Formula | Cl ₂ Mg |
| Molecular Weight | 95.21 |

10. Stability and reactivity

| | |
|-------------------------------|---|
| Reactive Hazard | None known, based on information available |
| Stability | Hygroscopic. |
| Conditions to Avoid | Incompatible products. Excess heat. Avoid dust formation. Exposure to moist air or water. (When mixed with limited amount of water enough heat may be generated to cause frothing). |
| Incompatible Materials | Strong oxidizing agents |

Hazardous Decomposition Products Magnesium oxides, Hydrogen chloride gas

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing. Reacts violently with water.

11. Toxicological information

Acute Toxicity

Product Information

Component Information

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|--------------------|---------------------------|-------------|-----------------|
| Magnesium chloride | LD50 = 2800 mg/kg (Rat) | Not listed | Not listed |

Toxicologically Synergistic Products No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation May cause irritation

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component | CAS-No | IARC | NTP | ACGIH | OSHA | Mexico |
|--------------------|-----------|------------|------------|------------|------------|------------|
| Magnesium chloride | 7786-30-3 | Not listed | Not listed | Not listed | Not listed | Not listed |

Mutagenic Effects No information available

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure None known

STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects, both acute and delayed No information available

Endocrine Disruptor Information No information available

Other Adverse Effects See actual entry in RTECS for complete information. The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

| Component | Freshwater Algae | Freshwater Fish | Microtox | Water Flea |
|--------------------|---------------------|--|--|----------------------|
| Magnesium chloride | EC50: 2200 mg/L/72h | Pimephales promelas: EC50: 2.12 g/L:96H | EC50 Pseudomonas putida: EC50:26,14 g/L/h Photobacterium phosphoreum: EC50: 36,3 mg/L/30 min Photobacterium phosphoreum: EC50: 77,2 mg/L/24 h | EC50 : 1400 mg/L/24h |

Persistence and Degradability Soluble in water Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation No information available.

Mobility Will likely be mobile in the environment due to its water solubility.

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT Not regulated

TDG Not regulated

IATA Not regulated

IMDG/IMO Not regulated

15. Regulatory information

International Inventories

| Component | TSCA | DSL | NDSL | EINECS | ELINCS | NLP | PICCS | ENCS | AICS | IECSC | KECL |
|--------------------|------|-----|------|-----------|--------|-----|-------|------|------|-------|------|
| Magnesium chloride | X | X | - | 232-094-6 | - | | X | X | X | X | X |

Legend:

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313 Not applicable

SARA 311/312 Hazard Categories

| | |
|-----------------------------------|----|
| Acute Health Hazard | No |
| Chronic Health Hazard | No |
| Fire Hazard | No |
| Sudden Release of Pressure Hazard | No |
| Reactive Hazard | No |

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA Occupational Safety and Health Administration
Not applicable

CERCLA
Not applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations Not applicable

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

16. Other information

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Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS