

# SAFETY DATA SHEET

## 1. PRODUCT

### 1.1 Product identifiers

Name: Magnesium ethoxide

CAS-No.: 2414-98-4

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

Identified uses : Laboratory chemicals, Manufacture of substances

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

#### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Self-heating substances and mixtures (Category 1), H251


Eye irritation (Category 2A), H319

Acute aquatic toxicity (Category 3), H402

Chronic aquatic toxicity (Category 3), H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram	
Signal word	Danger
Hazard statement(s)	H251 Self-heating: may catch fire. H319 Causes serious eye irritation. H412 Harmful to aquatic life with long lasting effects.
Precautionary statement(s)	P235 + P410 Keep cool. Protect from sunlight. P264 Wash skin thoroughly after handling. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical advice/ attention. P407 Maintain air gap between stacks/ pallets. P410 Protect from sunlight. P413 Store bulk masses greater than .? kg/ .? lbs at temperatures not exceeding .? °C/ .? °F. P420 Store away from other materials

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Reacts violently with water.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Synonyms: Magnesium ethylate  
Formula:  $C_4H_{10}MgO_2$   
CAS-No.: 2414-98-4  
EC-No.: 219-323-5

#### Hazardous components

Component	Classification	Concentration
<b>Magnesium ethanolate</b>		
	Self-heat. 1; Eye Irrit. 2A; Aquatic Acute 3; Aquatic Chronic 3; H251, H319, H412	-

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4 . FIRST AID MEASURES

### 4.1 Description of first aid measures

<b>General advice</b>
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
<b>If inhaled</b>
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
<b>In case of skin contact</b>
Wash off with soap and plenty of water. Consult a physician.
<b>In case of eye contact</b>
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
<b>If swallowed</b>
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4 .2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4 .2 Indication of any immediate medical attention and special treatment needed

no data available

## 5 . FIREFIGHTING MEASURES

### 5 .1 Extinguishing media

#### Suitable extinguishing media

Dry powder

### 5 .2 Special hazards arising from the substance or mixture

Carbon oxides, Magnesium oxide

### 5 .3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

### 5 .4 Further information

no data available

## 6 . ACCIDENTAL RELEASE MEASURES

### 6 .1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

### 6 .2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6 .3 Methods and materials for containment and cleaning up

Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-

b rushing and place in container for disposal according to local regulations (see section 13). Do not flush with water.

Keep in suitable, closed containers for disposal.

## 6.4 Reference to other sections

For disposal see section 13.

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## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking.

For precautions see section 2.2.

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

Keep container tightly closed in a dry and well-ventilated place.

Never allow product to get in contact with water during storage.

Moisture sensitive.

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

#### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment

Eye/face protection	Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin protection	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Full contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested: Dermatrill® (KCL 740 / Aldrich Z677272, Size M) Splash contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested: Dermatrill® (KCL 740 / Aldrich Z677272, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an
Body Protection	Impervious clothing, Flame retardant protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection	Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Control of environmental exposure	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9 . PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance	Form: granular Colour: light grey
Odour	no data available
Odour Threshold	no data available
pH	no data available
Melting point/freezing point	no data available
Initial boiling point and boiling range	no data available
Flash point	no data available
Evaporation rate	no data available
Flammability (solid, gas)	no data available
Upper/lower flammability or explosive limits	no data available
Vapour pressure	no data available
Vapour density	no data available
Relative density	no data available
Water solubility	no data available
Partition coefficient: n-octanol/water	no data available
Auto-ignition temperature	The substance or mixture is classified as self heating with the category 1.
Decomposition temperature	no data available
Viscosity	no data available
Explosive properties	no data available
Oxidizing properties	no data available

### 9.2 Other safety information

no data available

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

Reacts violently with water.

### 10.4 Conditions to avoid

Exposure to moisture.

### 10.5 Incompatible materials

Strong acids

### 10.6 Hazardous decomposition products

Other decomposition products - no data available

In the event of fire: see section 5

## 1 1. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

<b>Acute toxicity</b>
LD50 Oral - rat - > 3,160 mg/kg Inhalation: no data available Dermal: no data available no data available
<b>Skin corrosion/irritation</b>
<b>Serious eye damage/eye irritation</b>
no data available
<b>Respiratory or skin sensitisation</b>
no data available
<b>Germ cell mutagenicity</b>
no data available
<b>Carcinogenicity</b>
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a
<b>Reproductive toxicity</b>
no data available no data available
<b>Specific target organ toxicity -single exposure</b>
no data available
<b>Specific target organ toxicity -repeated exposure</b>
no data available
<b>Aspiration hazard</b>
no data available
<b>Additional Information</b>
RTECS: Not available Cough, Shortness of breath, Headache, Nausea, Vomiting, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## 1 2. ECOLOGICAL INFORMATION

### 12.1 Toxicity

Toxicity to fish	LC50 - Cyprinus carpio (Carp) - 422 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - 33 mg/l - 48 h
Toxicity to algae	EC50 - Desmodesmus subspicatus (green algae) - 975 mg/l - 72 h
Toxicity to bacteria	No data available

### 12.2 Persistence and degradability

Biodegradability	
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### 12.3 Bioaccumulative potential

n o data available

### 12.4 Mobility in soil

n o data available

### 12.5 Results of PBT and vPvB assessment

P BT/vPvB assessment not available as chemical safety assessment not required/not conducted

## 12.6 Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Harmful to aquatic life.

no data available

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## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

<b>Product</b>
Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
<b>Contaminated packaging</b>
Dispose of as unused product.

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## 14. TRANSPORT INFORMATION

### DOT (US)

UN number: 3205 Class: 4.2 Packing group: II

Proper shipping name: Alkaline earth metal alcoholates, n.o.s. (Magnesium ethanolate)

Marine pollutant: No

Poison Inhalation Hazard: No

### MDG

UN number: 3205 Class: 4.2 Packing group: II EMS-No: F-A, S-J

Proper shipping name: ALKALINE EARTH METAL ALCOHOLATES, N.O.S. (Magnesium ethanolate)

Marine pollutant: No

### ATA

UN number: 3205 Class: 4.2 Packing group: II

Proper shipping name: Alkaline earth metal alcoholates, n.o.s. (Magnesium ethanolate)

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## 15. REGULATORY INFORMATION

### SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### SARA 311/312 Hazards

Reactivity Hazard, Acute Health Hazard

### Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

### Pennsylvania Right To Know Components

Component	CAS-No.	Revision Date
Magnesium ethanolate	2414-98-4	

### New Jersey Right To Know Components

Component	CAS-No.	Revision Date
Magnesium ethanolate	2414-98-4	

### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## 16. OTHER INFORMATION

### Full text of H-Statements referred to under sections 2 and 3.

Aquatic Acute Acute aquatic toxicity

Aquatic Chronic Chronic aquatic toxicity

Eye Irrit. Eye irritation

H 251 Self-heating: may catch fire.

H 319 Causes serious eye irritation.

H 402 Harmful to aquatic life.

H 412 Harmful to aquatic life with long lasting effects.

### H MIS Rating

Health hazard: 2

Chronic Health Hazard:

Flammability: 0

Physical Hazard 2

### N FPA Rating

Health hazard: 2

Fire Hazard: 0

Reactivity Hazard: 2