

**SAFETY DATA SHEET**

according to the Global Harmonized System (and with all of the information required by the HPR)

Revision Date 06/14/2018

Version 1.5

**SECTION 1. Identification****Product identifier**

Product number	102161
Product name	Calcium sulfate dihydrate precipitated for analysis EMSURE®
CAS-No.	10101-41-4

**Relevant identified uses of the substance or mixture and uses advised against**

Identified uses	Reagent for analysis
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**Details of the supplier of the safety data sheet**

Company	Millipore (Canada) Ltd   109 Woodbine Downs Blvd. Unit 5   Etobicoke   Ontario M9W 6Y1   Canada   General Inquiries: +1 800-645-5476   Monday to Friday, 9:00 AM to 4:00 PM Eastern Time (GMT-5) MilliporeSigma is a business of Merck KGaA, Darmstadt, Germany.
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Emergency telephone	800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week
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**SECTION 2. Hazards identification****GHS-Labeling**

Not a dangerous substance according to GHS.

**Other hazards**

None known.

**SECTION 3. Composition/information on ingredients**

Formula	CaSO <sub>4</sub> * 2 H <sub>2</sub> O	CaO <sub>4</sub> S * 2 H <sub>2</sub> O	CaO <sub>4</sub> S * 2 H <sub>2</sub> O (Hill)
Molar mass	172.17 g/mol		

Remarks	WHMIS hazardous composition: No ingredients are hazardous according to the CPR criteria.
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**SECTION 4. First aid measures****Description of first-aid measures***Inhalation*

After inhalation: fresh air.

# SAFETY DATA SHEET

according to the Global Harmonized System (and with all of the information required by the HPR)

Product number

102161

Version 1.5

Product name

Calcium sulfate dihydrate precipitated for analysis EMSURE®

---

### *Skin contact*

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower.

### *Eye contact*

After eye contact: rinse out with plenty of water.

### *Ingestion*

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

Never give anything by mouth to an unconscious person.

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

We have no description of any toxic symptoms.

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

No information available.

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## **SECTION 5. Fire-fighting measures**

### **Extinguishing media**

#### *Suitable extinguishing media*

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### *Unsuitable extinguishing media*

For this substance/mixture no limitations of extinguishing agents are given.

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

Not combustible.

Ambient fire may liberate hazardous vapors.

Fire may cause evolution of:

Sulfur oxides

### **Advice for firefighters**

#### *Special protective equipment for fire-fighters*

In the event of fire, wear self-contained breathing apparatus.

#### *Further information*

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

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## **SECTION 6. Accidental release measures**

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

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders:

Protective equipment see section 8.

### **Environmental precautions**

Do not let product enter drains.

### **Methods and materials for containment and cleaning up**

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# SAFETY DATA SHEET

according to the Global Harmonized System (and with all of the information required by the HPR)

Product number

102161

Version 1.5

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Calcium sulfate dihydrate precipitated for analysis EMSURE®

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

## SECTION 7. Handling and storage

### Precautions for safe handling

Observe label precautions.

### Conditions for safe storage, including any incompatibilities

Tightly closed. Dry.

Store at +5°C to +30°C (+41°F to +86°F).

## SECTION 8. Exposure controls/personal protection

### Exposure limit(s)

#### Ingredients

Basis	Value	Threshold limits	Remarks
<i>Calcium sulfate dihydrate 10101-41-4</i>			
CAD AB OEL	Time Weighted Average (TWA):	10 mg/m <sup>3</sup>	
	Time Weighted Average (TWA):	10 mg/m <sup>3</sup>	
CAD BC OEL	Short Term Exposure Limit (STEL):	20 mg/m <sup>3</sup>	Form of exposure: Total dust.
	Time Weighted Average (TWA):	10 mg/m <sup>3</sup>	Form of exposure: Total dust.
	Time Weighted Average (TWA):	3 mg/m <sup>3</sup>	Form of exposure: Respirable fraction.
	Time Weighted Average (TWA):	10 mg/m <sup>3</sup>	Form of exposure: Inhalable
CAD MB OEL	Time Weighted Average (TWA):	10 mg/m <sup>3</sup>	Form of exposure: Inhalable fraction.
CAD ON OEL	Time Weighted Average (TWA):	10 mg/m <sup>3</sup>	Form of exposure: Inhalable fraction.
CAD SK OEL	8 hour average contamination limit:	10 mg/m <sup>3</sup>	
	15 minute average contamination limit:	20 mg/m <sup>3</sup>	
OEL (QUE)	Time Weighted Average (TWA):	10 mg/m <sup>3</sup>	Form of exposure: Total dust.
	Time Weighted Average (TWA):	5 mg/m <sup>3</sup>	Form of exposure: Respirable dust.
	Time Weighted Average (TWA):	10 mg/m <sup>3</sup>	Form of exposure: Total dust.
	Time Weighted Average (TWA):	5 mg/m <sup>3</sup>	Form of exposure: Respirable dust.

### Engineering measures

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

### Individual protection measures

Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled. The chemical resistance of the protective equipment should be inquired at the respective supplier.

# SAFETY DATA SHEET

according to the Global Harmonized System (and with all of the information required by the HPR)

Product number

102161

Version 1.5

Product name

Calcium sulfate dihydrate precipitated for analysis EMSURE®

---

### *Hygiene measures*

Change contaminated clothing. Wash hands after working with substance.

### *Eye/face protection*

Safety glasses

### *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.

### *Respiratory protection*

required when dusts are generated.

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## **SECTION 9. Physical and chemical properties**

Physical state	solid
Color	colorless
Odor	odorless
Odor Threshold	Not applicable
pH	7.0 at 50 g/l 68 °F (20 °C) (slurry)
Melting point	No information available.
Boiling point/boiling range	Not applicable
Flash point	Not applicable
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Vapor pressure	Not applicable
Relative vapor density	No information available.
Density	2.32 g/cm <sup>3</sup> at 68 °F (20 °C)

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# SAFETY DATA SHEET

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Product name	Calcium sulfate dihydrate precipitated for analysis EMSURE®	

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Relative density	No information available.
Water solubility	ca.2 g/l at 68 °F (20 °C)
Partition coefficient: n-octanol/water	Not applicable
Autoignition temperature	No information available.
Decomposition temperature	> 284 °F (> 140 °C) Elimination of water of crystallization
Viscosity, dynamic	No information available.
Explosive properties	Not classified as explosive.
Oxidizing properties	none
Ignition temperature	Not applicable
Bulk density	ca.400 - 600 kg/m <sup>3</sup>

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## SECTION 10. Stability and reactivity

### Reactivity

See below

### Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

### Possibility of hazardous reactions

no information available

### Conditions to avoid

Strong heating (decomposition).

### Incompatible materials

no information available

### Hazardous decomposition products

in the event of fire: See section 5.

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## SECTION 11. Toxicological information

### Information on toxicological effects

*Likely route of exposure*

Eye contact, Skin contact, Ingestion

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102161

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---

## *Acute oral toxicity*

LD50 Rat: > 10,000 mg/kg (IUCLID)

## *Skin irritation*

human

Result: No irritation

(IUCLID)

## *Eye irritation*

human

Result: No eye irritation

(IUCLID)

## *Sensitization*

Human experience

Result: negative

(IUCLID)

## *Genotoxicity in vitro*

Ames test

Result: negative

(Lit.)

## *Specific target organ systemic toxicity - single exposure*

The substance or mixture is not classified as specific target organ toxicant, single exposure.

## *Specific target organ systemic toxicity - repeated exposure*

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

## *Aspiration hazard*

Regarding the available data the classification criteria are not fulfilled.

## **Carcinogenicity**

IARC

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

ACGIH

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

## **Further information**

Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

Handle in accordance with good industrial hygiene and safety practice.

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102161

Version 1.5

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---

## SECTION 12. Ecological information

### Ecotoxicity

#### *Toxicity to fish*

LC50 *Lepomis macrochirus* (Bluegill sunfish): 2,980 mg/l; 96 h (IUCLID)

### Persistence and degradability

No information available.

### Bioaccumulative potential

#### *Partition coefficient: n-octanol/water*

Not applicable

### Mobility in soil

No information available.

#### *Additional ecological information*

Discharge into the environment must be avoided.

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## SECTION 13. Disposal considerations

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

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## SECTION 14. Transport information

### Land transport (DOT)

Not classified as dangerous in the meaning of transport regulations.

### Air transport (IATA)

Not classified as dangerous in the meaning of transport regulations.

### Sea transport (IMDG)

Not classified as dangerous in the meaning of transport regulations.

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## SECTION 15. Regulatory information

### United States of America

### Canada

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

### Notification status

TSCA: All components of the product are listed in the TSCA-inventory.

DSL: All components of this product are on the Canadian DSL

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---

### SECTION 16. Other information

#### **Training advice**

Provide adequate information, instruction and training for operators.

#### **Key or legend to abbreviations and acronyms used in the safety data sheet**

Used abbreviations and acronyms can be looked up at [www.wikipedia.org](http://www.wikipedia.org).

Revision Date 06/14/2018

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The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to appropriate safety precautions. It does not represent a warranty of any product properties and we assume no liability for any loss or injury which may result from the use of this information. Users should conduct their own investigations to determine the suitability of the information.

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