

## SAFETY DATA SHEET

Creation Date 26-Sep-2009

Revision Date 25-Dec-2021

Revision Number 6

### 1. Identification

**Product Name** Calcium sulfate hemihydrate

**Cat No. :** AC385350000; AC385350025; AC385351000; AC385355000

**CAS No** 10034-76-1  
**Synonyms** No information available

**Recommended Use** Laboratory chemicals.  
**Uses advised against** Food, drug, pesticide or biocidal product use.

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

##### Company

Fisher Scientific Company  
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)

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

#### Label Elements

None required

#### Hazards not otherwise classified (HNOC)

None identified

### 3. Composition/Information on Ingredients

| Component                   | CAS No     | Weight % |
|-----------------------------|------------|----------|
| Calcium sulfate hemihydrate | 10034-76-1 | >95      |
| Calcium sulfate             | 7778-18-9  | -        |

#### 4. First-aid measures

|                                            |                                                                                                                 |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| <b>Eye Contact</b>                         | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention. |
| <b>Skin Contact</b>                        | Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.     |
| <b>Inhalation</b>                          | Remove to fresh air. If not breathing, give artificial respiration. If symptoms persist, call a physician.      |
| <b>Ingestion</b>                           | Do NOT induce vomiting. Get medical attention immediately if symptoms occur.                                    |
| <b>Most important symptoms and effects</b> | No information available.                                                                                       |
| <b>Notes to Physician</b>                  | Treat symptomatically                                                                                           |

#### 5. Fire-fighting measures

|                                         |                                                                                       |
|-----------------------------------------|---------------------------------------------------------------------------------------|
| <b>Suitable Extinguishing Media</b>     | Substance is nonflammable; use agent most appropriate to extinguish surrounding fire. |
| <b>Unsuitable Extinguishing Media</b>   | No information available                                                              |
| <b>Flash Point</b>                      | No information available                                                              |
| <b>Method -</b>                         | No information available                                                              |
| <b>Autoignition Temperature</b>         | No information available                                                              |
| <b>Explosion Limits</b>                 |                                                                                       |
| <b>Upper</b>                            | No data available                                                                     |
| <b>Lower</b>                            | No data available                                                                     |
| <b>Sensitivity to Mechanical Impact</b> | No information available                                                              |
| <b>Sensitivity to Static Discharge</b>  | No information available                                                              |

**Specific Hazards Arising from the Chemical**  
Non-combustible.

#### **Hazardous Combustion Products**

Sulfur oxides. Calcium oxides.

#### **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**  
0

**Flammability**  
1

**Instability**  
1

**Physical hazards**  
N/A

#### 6. Accidental release measures

|                                             |                                                                                                                                  |
|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>Personal Precautions</b>                 | Ensure adequate ventilation. Avoid dust formation. Use personal protective equipment as required.                                |
| <b>Environmental Precautions</b>            | See Section 12 for additional Ecological Information.                                                                            |
| <b>Methods for Containment and Clean Up</b> | Sweep up and shovel into suitable containers for disposal. Do not let this chemical enter the environment. Avoid dust formation. |

## 7. Handling and storage

**Handling** Ensure adequate ventilation. Wear personal protective equipment/face protection. Avoid contact with skin and eyes. Do not breathe dust. Do not ingest. If swallowed then seek immediate medical assistance. Minimize dust generation and accumulation. Wash hands before breaks and immediately after handling the product.

**Storage.** Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Incompatible Materials. Strong oxidizing agents.

## 8. Exposure controls / personal protection

### Exposure Guidelines

| Component                   | ACGIH TLV                 | OSHA PEL                                                                                                                           | NIOSH IDLH                                            | Mexico OEL (TWA)          |
|-----------------------------|---------------------------|------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|---------------------------|
| Calcium sulfate hemihydrate | TWA: 10 mg/m <sup>3</sup> |                                                                                                                                    |                                                       | TWA: 10 mg/m <sup>3</sup> |
| Calcium sulfate             | TWA: 10 mg/m <sup>3</sup> | (Vacated) TWA: 15 mg/m <sup>3</sup><br>(Vacated) TWA: 5 mg/m <sup>3</sup><br>TWA: 15 mg/m <sup>3</sup><br>TWA: 5 mg/m <sup>3</sup> | TWA: 10 mg/m <sup>3</sup><br>TWA: 5 mg/m <sup>3</sup> | TWA: 10 mg/m <sup>3</sup> |

### Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH IDLH: NIOSH - National Institute for Occupational Safety and Health

**Engineering Measures** None under normal use conditions.

### Personal Protective Equipment

**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.

**Skin and body protection** Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection** No protective equipment is needed under normal use conditions.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

|                                  |                          |
|----------------------------------|--------------------------|
| Physical State                   | Powder Solid             |
| Appearance                       | Off-white                |
| Odor                             | No information available |
| Odor Threshold                   | No information available |
| pH                               | No information available |
| Melting Point/Range              | No data available        |
| Boiling Point/Range              | No information available |
| 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                       | 0.8 g/L @ 20 °C          |

|                                        |                                            |
|----------------------------------------|--------------------------------------------|
| Partition coefficient; n-octanol/water | No data available                          |
| Autoignition Temperature               | No information available                   |
| Decomposition Temperature              | No information available                   |
| Viscosity                              | Not applicable                             |
| Molecular Formula                      | Ca S O <sub>4</sub> . 0.5 H <sub>2</sub> O |
| Molecular Weight                       | 145.15                                     |

## 10. Stability and reactivity

|                                  |                                                                              |
|----------------------------------|------------------------------------------------------------------------------|
| Reactive Hazard                  | None known, based on information available                                   |
| Stability                        | Hygroscopic.                                                                 |
| Conditions to Avoid              | Incompatible products. Exposure to moist air or water. Avoid dust formation. |
| Incompatible Materials           | Strong oxidizing agents                                                      |
| Hazardous Decomposition Products | Sulfur oxides, Calcium oxides                                                |
| Hazardous Polymerization         | No information available.                                                    |
| Hazardous Reactions              | None under normal processing.                                                |

## 11. Toxicological information

### Acute Toxicity

#### Product Information

|             |                                                                               |
|-------------|-------------------------------------------------------------------------------|
| Oral LD50   | Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg. |
| Dermal LD50 | Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg. |
| Mist LC50   | Based on ATE data, the classification criteria are not met. ATE > 5 mg/l.     |

#### Component Information

| Component       | LD50 Oral            | LD50 Dermal | LC50 Inhalation              |
|-----------------|----------------------|-------------|------------------------------|
| Calcium sulfate | > 3000 mg/kg ( Rat ) | Not listed  | LC50 > 3.26 mg/L ( Rat ) 4 h |

|                                      |                          |
|--------------------------------------|--------------------------|
| 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     |
|-----------------------------|------------|------------|------------|------------|------------|------------|
| Calcium sulfate hemihydrate | 10034-76-1 | Not listed | Not listed | Not listed | Not listed | Not listed |
| Calcium sulfate             | 7778-18-9  | 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** The toxicological properties have not been fully investigated.

## 12. Ecological information

### Ecotoxicity

Do not empty into drains.

| Component       | Freshwater Algae | Freshwater Fish                          | Microtox   | Water Flea           |
|-----------------|------------------|------------------------------------------|------------|----------------------|
| Calcium sulfate | Not listed       | Lepomis macrochirus: LC50: 2.98 mg/L/96H | Not listed | EC50: 3200 mg/L/120H |

**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.

| Component       | log Pow |
|-----------------|---------|
| Calcium sulfate | -0.2    |

## 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

### United States of America Inventory

| Component                   | CAS No     | TSCA | TSCA Inventory notification - Active-Inactive | TSCA - EPA Regulatory Flags |
|-----------------------------|------------|------|-----------------------------------------------|-----------------------------|
| Calcium sulfate hemihydrate | 10034-76-1 | -    | -                                             | -                           |
| Calcium sulfate             | 7778-18-9  | X    | ACTIVE                                        | -                           |

#### **Legend:**

**TSCA** US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

-/- - Not Listed

**TSCA 12(b)** - Notices of Export Not applicable

### International Inventories

Canada (DSL/NDL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

| Component                   | CAS No     | DSL | NDL | EINECS    | PICCS | ENCS | ISHL | AICS | IECSC | KECL     |
|-----------------------------|------------|-----|-----|-----------|-------|------|------|------|-------|----------|
| Calcium sulfate hemihydrate | 10034-76-1 | -   | -   | -         | X     | -    |      | X    | X     | -        |
| Calcium sulfate             | 7778-18-9  | X   | -   | 231-900-3 | X     | X    | X    | X    | X     | KE-04614 |

KECL - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

#### U.S. Federal Regulations

|                                                             |                                    |
|-------------------------------------------------------------|------------------------------------|
| <b>SARA 313</b>                                             | Not applicable                     |
| <b>SARA 311/312 Hazard Categories</b>                       | See section 2 for more information |
| <b>CWA (Clean Water Act)</b>                                | Not applicable                     |
| <b>Clean Air Act</b>                                        | Not applicable                     |
| <b>OSHA - Occupational Safety and Health Administration</b> | Not applicable                     |
| <b>CERCLA</b>                                               | Not applicable                     |

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

#### **U.S. State Right-to-Know Regulations**

| Component       | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|-----------------|---------------|------------|--------------|----------|--------------|
| Calcium sulfate | X             | X          | X            | -        | -            |

#### **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

#### **Authorisation/Restrictions according to EU REACH**

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

| Component                   | CAS No     | OECD HPV | Persistent Organic Pollutant | Ozone Depletion Potential | Restriction of Hazardous Substances (RoHS) |
|-----------------------------|------------|----------|------------------------------|---------------------------|--------------------------------------------|
| Calcium sulfate hemihydrate | 10034-76-1 | Listed   | Not applicable               | Not applicable            | Not applicable                             |
| Calcium sulfate             | 7778-18-9  | Listed   | Not applicable               | Not applicable            | Not applicable                             |

| Component                   | CAS No     | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements | Rotterdam Convention (PIC) | Basel Convention (Hazardous Waste) |
|-----------------------------|------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------------|------------------------------------|
| Calcium sulfate hemihydrate | 10034-76-1 | Not applicable                                                                            | Not applicable                                                                           | Not applicable             | Not applicable                     |
| Calcium sulfate             | 7778-18-9  | Not applicable                                                                            | Not applicable                                                                           | Not applicable             | Not applicable                     |

## 16. Other information

|                         |                                                                                                                                                                                                                                         |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Prepared By</b>      | Regulatory Affairs<br>Thermo Fisher Scientific<br>Email: EMSDS.RA@thermofisher.com                                                                                                                                                      |
| <b>Creation Date</b>    | 26-Sep-2009                                                                                                                                                                                                                             |
| <b>Revision Date</b>    | 25-Dec-2021                                                                                                                                                                                                                             |
| <b>Print Date</b>       | 25-Dec-2021                                                                                                                                                                                                                             |
| <b>Revision Summary</b> | 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**