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| <a href="#">Calcium Sulfate</a>                            | <a href="#">Pricing &gt;</a>   |
| <a href="#">Calcium Sulfate Nanoparticles / Nanopowder</a> | <a href="#">Pricing &gt;</a>   |
| <a href="#">Calcium Sulfate Solution</a>                   | <a href="#">Pricing &gt;</a>   |
| <b>Linear Formula</b>                                      | CaSO <sub>4</sub>  |
| <b>Pubchem CID</b>   | 24497  |
| <b>MDL Number</b>  | MFCD00010912   |
| <b>EC No.</b>  | 231-900-3  |
| <b>IUPAC Name</b>  | calcium; sulfate   |
| <b>Beilstein/Reaxys No.</b>                                | N/A  |
| <b>SMILES</b>  | C(=O)(C(=O)[O-])[O-].O.[Ca+2]  |
| <b>Inchl Identifier</b>                                    | InChI=1S/Ca.H2O4S/c;1-5(2,3)4/h;(H2,1,2,3,4)/q+2;/p-2  |
| <b>Inchl Key</b>   | OSGAYBCDTRGGQ-UHFFFAOYSA-L   |
| <b>Signal Word</b>   | Danger   |
| <b>Hazard Statements</b>                                   | H317-H319-H334-H341-H350i-H360F-H412   |
| <b>Hazard Codes</b>  | N/A  |
| <b>Precautionary Statements</b>                            | P201-P261-P280-P284-P304 + P340-P308 + P313  |
| <b>Flash Point</b>   | Non-flammable  |
| <b>Risk Codes</b>  | N/A  |
| <b>Safety Statements</b>                                   | N/A  |
| <b>Transport Information</b>                               | UN 3077 9 / PGIII  |
| <b>WGK Germany</b>   | 1  |
| <b>GHS Pictograms</b>                                      | <a href="#">GHS08 Health Hazard</a><br> |

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## SAFETY DATA SHEET

Date Accessed: 04/18/2024

Date Revised: 01/15/2022

### SECTION 1. IDENTIFICATION

**Product Identifiers:** All applicable American Elements product codes for CAS #7778-18-9

**Relevant identified uses of the substance:**

Scientific research and development

Supplier details:

American Elements

10884 Weyburn Ave.

Los Angeles, CA 90024

Tel: +1 310-208-0551

Fax: +1 310-208-0351

Emergency telephone number:

Domestic, North America +1 800-424-9300

International +1 703-527-3887

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## SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture in  
accordance with 29 CFR 1910 (OSHA HCS)

GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

Hazards not otherwise classified

No data available

GHS label elements

GHS label elements, including precautionary  
statements

Hazard pictograms



GHS07

Signal word

Warning

Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary statements

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.

P362 Take off contaminated clothing.

P321 Specific treatment (see on this label).

P332+P313 If skin irritation occurs: Get medical  
advice/attention.

P337+P313 If eye irritation persists: Get medical  
advice/attention.

WHMIS classification

D2B - Toxic material causing other toxic effects

Classification system

HMIS ratings (scale 0-4)

(Hazardous Materials Identification System)

HEALTH

FIRE

REACTIVITY

1

0

1

Health (acute effects) = 1

Flammability = 0

Physical Hazard = 1

Other hazards

Results of PBT and vPvB assessment

PBT:

N/A

vPvB:

N/A

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### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substances

CAS No. / Substance Name:

7778-18-9 Calcium sulfate

Identification number(s):

EC number:

231-900-3

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### **SECTION 4. FIRST AID MEASURES**

Description of first aid measures

If inhaled:

Supply patient with fresh air. If not breathing, provide artificial respiration. Keep patient warm.

Seek immediate medical advice.

In case of skin contact:

Immediately wash with soap and water; rinse thoroughly.

Seek immediate medical advice.

In case of eye contact:

Rinse opened eye for several minutes under running water. Consult a physician.

If swallowed:

Seek medical treatment.

Information for doctor

Most important symptoms and effects, both acute and delayed

No data available

Indication of any immediate medical attention and special treatment needed

No data available

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## **SECTION 5. FIREFIGHTING MEASURES**

Extinguishing media

Suitable extinguishing agents

Product is not flammable. Use fire-fighting measures that suit the surrounding fire.

Special hazards arising from the substance or mixture

If this product is involved in a fire, the following can be released:

Sulfur oxides (SO<sub>x</sub>)

Calcium oxide

Advice for firefighters

Protective equipment:

Wear self-contained respirator.

Wear fully protective impervious suit.

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## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Environmental precautions:

Do not allow material to be released to the environment without official permits.

Methods and materials for containment and cleanup:

Pick up mechanically.

Prevention of secondary hazards:

No special measures required.

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.

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## **SECTION 7. HANDLING AND STORAGE**

Handling

Precautions for safe handling

Handle under dry protective gas.

Keep container tightly sealed.

Store in cool, dry place in tightly closed containers.

Ensure good ventilation at the workplace.

Information about protection against explosions and fires:

The product is not flammable

Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles:

No special requirements.

Information about storage in one common storage facility:

Store away from water/moisture.

Store away from oxidizing agents.

Further information about storage conditions:

Store under dry inert gas.

This product is hygroscopic.

Keep container tightly sealed.

Store in cool, dry conditions in well-sealed containers.

Protect from humidity and water.

Specific end use(s)

No data available

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## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Additional information about design of technical systems:

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Control parameters

Components with limit values that require monitoring at the workplace:

7778-18-9 Calcium sulfate (100.0%)

PEL (USA) Long-term value:  $15^* 5^{**} \text{ mg/m}^3$

\*total dust \*\*respirable fraction

REL (USA) Long-term value:  $10^* 5^{**} \text{ mg/m}^3$

\*total dust \*\*respirable fraction

TLV (USA) Long-term value:  $10^* \text{ mg/m}^3$

\*as inhalable fraction

EL (Canada) Long-term value:  $10 \text{ mg/m}^3$

inhalable

EV (Canada) Long-term value:  $10 \text{ mg/m}^3$

inhalable

Additional information:

No data

Exposure controls

Personal protective equipment

Follow typical protective and hygienic practices for handling chemicals.

Keep away from foodstuffs, beverages and feed.

Remove all soiled and contaminated clothing immediately.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Maintain an ergonomically appropriate working environment.

Breathing equipment:

Use suitable respirator when high concentrations are present.

Recommended filter device for short term use:

Use a respirator with type N95 (USA) or PE (EN 143) cartridges as a backup to engineering controls. Risk assessment should be performed to determine if air-purifying respirators are appropriate. Only use equipment tested and approved under appropriate government standards.

Protection of hands:

Impervious gloves

Inspect gloves prior to use.

Suitability of gloves should be determined both by material and quality, the latter of which may vary by manufacturer.

Material of gloves

Nitrile rubber, NBR

Penetration time of glove material (in minutes)

480

Glove thickness

0.11 mm

Eye protection:

Safety glasses

Body protection:

Protective work clothing

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## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Information on basic physical and chemical properties

Appearance:

Form: Powder or granules

Color: White

Odor: Odorless

Odor threshold: No data available.

pH: N/A

Melting point/Melting range: 1450 °C (2642 °F)

Boiling point/Boiling range: No data available

Sublimation temperature / start: No data available

Flammability (solid, gas)

No data available.

Ignition temperature: No data available

Decomposition temperature: No data available

Autoignition: No data available.

Danger of explosion: No data available.

Explosion limits:

Lower: No data available

Upper: No data available

Vapor pressure: N/A

Density at 20 °C (68 °F): 2.96 g/cm<sup>3</sup> (24.701 lbs/gal)

Relative density

No data available.

Vapor density  
N/A  
Evaporation rate  
N/A  
Solubility in / Miscibility with Water at 20 °C (68 °F):  
2.4 g/l  
Partition coefficient (n-octanol/water): No data  
available.  
Viscosity:  
Dynamic: N/A  
Kinematic: N/A  
Other information  
No data available

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## **SECTION 10. STABILITY AND REACTIVITY**

Reactivity  
No data available  
Chemical stability  
Stable under recommended storage conditions.  
Thermal decomposition / conditions to be avoided:  
Decomposition will not occur if used and stored  
according to specifications.  
Possibility of hazardous reactions  
Reacts with strong oxidizing agents  
Conditions to avoid  
No data available  
Incompatible materials:  
Water/moisture  
Oxidizing agents  
Hazardous decomposition products:  
Sulfur oxides (SO<sub>x</sub>)  
Calcium oxide

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## **SECTION 11. TOXICOLOGICAL INFORMATION**

Information on toxicological effects  
Acute toxicity:  
No effects known.  
LD/LC50 values that are relevant for classification:  
No data  
Skin irritation or corrosion:  
Causes skin irritation.  
Eye irritation or corrosion:  
Causes serious eye irritation.  
Sensitization:  
No sensitizing effects known.  
Germ cell mutagenicity:  
No effects known.  
Carcinogenicity:

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

Reproductive toxicity:

No effects known.

Specific target organ system toxicity - repeated exposure:

No effects known.

Specific target organ system toxicity - single exposure:

No effects known.

Aspiration hazard:

No effects known.

Subacute to chronic toxicity:

No effects known.

Additional toxicological information:

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

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## **SECTION 12. ECOLOGICAL INFORMATION**

Toxicity

Aquatic toxicity:

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Additional ecological information:

Do not allow material to be released to the environment without official permits.

Do not allow undiluted product or large quantities to reach groundwater, water courses, or sewage systems.

Avoid transfer into the environment.

Results of PBT and vPvB assessment

PBT:

N/A

vPvB:

N/A

Other adverse effects

No data available

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## **SECTION 13. DISPOSAL CONSIDERATIONS**

Waste treatment methods

Recommendation

Consult official regulations to ensure proper disposal.



Uncleaned packagings:  
Recommendation:  
Disposal must be made according to official regulations.

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## **SECTION 14. TRANSPORT INFORMATION**

UN-Number  
DOT, ADN, IMDG, IATA  
N/A  
UN proper shipping name  
DOT, ADN, IMDG, IATA  
N/A  
Transport hazard class(es)  
DOT, ADR, ADN, IMDG, IATA  
Class  
N/A  
Packing group  
DOT, IMDG, IATA  
N/A  
Environmental hazards:  
N/A  
Special precautions for user  
N/A  
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code  
N/A  
Transport/Additional information:  
DOT  
Marine Pollutant (DOT):  
No

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## **SECTION 15. REGULATORY INFORMATION**

Safety, health and environmental regulations/legislation specific for the substance or mixture  
GHS GHS label elements, including precautionary statements  
Hazard pictograms  
GHS07  
Signal word  
Warning  
Hazard statements  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
Precautionary statements  
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.

P362 Take off contaminated clothing.

P321 Specific treatment (see on this label).

P332+P313 If skin irritation occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

National regulations

All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.

All components of this product are listed on the Canadian Domestic Substances List (DSL).

SARA Section 313 (specific toxic chemical listings) Substance is not listed.

California Proposition 65

Prop 65 - Chemicals known to cause cancer Substance is not listed.

Prop 65 - Developmental toxicity Substance is not listed.

Prop 65 - Developmental toxicity, female Substance is not listed.

Prop 65 - Developmental toxicity, male Substance is not listed.

Information about limitation of use:

For use only by technically qualified individuals.

Other regulations, limitations and prohibitive regulations

Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006.

Substance is not listed.

The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed.

Substance is not listed.

Annex XIV of the REACH Regulations (requiring Authorisation for use)

Substance is not listed.

Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

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## 16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions.

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