Section 1 Identification Page E1 of E2

# **INNOVATING SCIENCE**

"Cutting edge science for the classroom"

221 Rochester Street Avon, NY 14414-940 (585) 226-6177 CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300 For laboratory and industrial use only. Not for drug, food or household use.

Product CALCIUM SULFATE, HEMIHYDRATE

Synonyms Plaster of Paris / Dried Gypsum
Section 2 Hazards identification

Signal word: WARNING Pictograms: GHS08 Target organs: None known



GHS Classification: \*STOT-RE (Category 2)

### GHS Label information: Hazard statement:

\*H373: May cause damage to organs (*lungs*) through prolonged or repeated exposure (*inhalation*).

\* Respirable dust particles containing crystalline silica may be generated by crushing. There are no known hazards associated with this material when used as recommended.

### Precautionary statement:

P260: Do not breathe dust.

P314: Get medical advice/attention if you feel unwell.

P501: Dispose of contents/container to a licensed chemical disposal agency in

accordance with local/regional/national regulations.

## Hazards not otherwise classified:

Health hazards not otherwise classified (HHNOC) - Not Known Physical hazards not otherwise classified (PHNOC) - Not Known

Section 3 Composition / information on ingredients							
Chemical Name	CAS#	%	EINECS				
Calcium sulfate, hemihydrate Calcium carbonate Crystalline silica	26499-65-0 1317-65-3 14808-60-7	60-100% 10-30% 0.5-1.5%	231-900-3 (anhydrous) 215-279-6 238-878-4				

## Section 4 First aid measures

**INGESTION:** Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: PROLONGED INHALATION OF PARTICULATE DUST MAY BE HARMFUL. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT:** MAY CAUSE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: MAY CAUSE ABRASIONS. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

## Section 5 Fire fighting measures

Suitable Extinguishing Media: Product will not burn or support fire. Use any media suitable for extinguishing supporting fire

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: Limestone reacts with acids to release carbon dioxide.

# Section 6 Accidental release measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Section 7 Page E2 of E2 Handling and storage

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, dry, well-ventilated area.

Section 8	Exposure controls / personal protection						
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)			
Exposure Limits:	Calcium sulfate	TWA: 10 I mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> Respirable fraction	TWA: 5 mg/m <sup>3</sup> Respirable fraction			

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

### Physical and chemical properties Section 9

Appearance: Solid. White powder.

Odor: No odor.

Odor threshold: Data not available

pH: Data not available

Melting / Freezing point: Data not available

Boiling point: Data not available Flash point: Not flammable

Evaporation rate ( = 1): Not applicable Flammability (solid/gas): Data not available. Explosion limits: Lower / Upper: Not flammable Vapor pressure (mm Hg): Data not available Vapor density (Air = 1): Data not available

Relative density (Specific gravity): 2.8 Solubility(ies): Data not available

Partition coefficient: Not applicable Auto-ignition temperature: Not applicable Decomposition temperature: Data not available Viscosity: Data not available.

Marine pollutant: No

Molecular formula: CaSO<sub>4</sub>•1/2H<sub>2</sub>O Molecular weight: 145.15

### Section 10 Stability and reactivity

Chemical stability: Stable Hazardous polymerization: Will not occur.

Conditions to avoid: Avoid contact with acids.

Incompatible materials: Strong oxidizers, bases. Reacts with acids to liberate carbon dioxide.

Hazardous decomposition products: Carbon oxides, nitrogen oxides.

### Section 11 **Toxicological information**

Acute toxicity: Data not available

Skin corrosion/irritation: Data not available Serious eye damage/irritation: Data not available Respiratory or skin sensitization: Data not available

Germ cell mutagenicity: Data not available

Carcinogenity: Data not available

NTP: Known to be a human carcinogen (respirable). [crystalline silica]\* IARC classified: Group 1: Carcinogenic to humans. [crystalline silica]\*

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. Ca Prop 65: A WARNING! This product can expose you to a chemical, crystalline silica, which is known to the State of California to cause cancer.

Reproductive toxicity: Data not available STOT-single exposure: Data not available

STOT-repeated exposure: Inhalation - May cause damage to organs through prolonged or repeated exposure. [crystalline silica]\*

Aspiration hazard: Data not available

Potential health effects:

Inhalation: May cause irritation to the respiratory tract (nose, mouth, mucous membranes).

Ingestion: Harmful if swallowed. May cause irritation to mucous membranes. May result in obstruction when material hardens.

Skin: May cause irritation and/or dry skin. May develop enough heat to cause burns if a large mass is kept in contact with skin while hardening (such as casts).

Eves: May cause irritation.

Signs and symptoms of exposure: Prolonged inhalation of particulate dust, may result in silicosis, a disabling pulmonary fibrosis characterized by fibrotic changes and miliary nodules in the lungs, a dry cough, shortness of breath, emphysema, decreased chest expansion, and increased susceptibility to tuberculosis,

Additional information: RTECS #: TP0700000

\* Respirable dust particles containing crystalline silica may be generated by crushing. There are no known hazards associated with this material when used as recommended.

### Section 12 **Ecological information**

Toxicity to fish: No data available

Toxicity to daphnia and other aquatic invertebrates: No data available

Toxicity to algae: No data available

Persistence and degradability: No data available Bioaccumulative potential: No data available Mobility in soil: No data available PBT and vPvB assessment: No data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

### Disposal considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Reportable Quantity: No

#### Section 14 Transport information

UN/NA number: Not applicable Shipping name: Not Regulated Hazard class: Not applicable Packing group: Not applicable

2020 ERG Guide # Not applicable **Exceptions:** Not applicable

### Section 15 Regulatory information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Calcium sulfate, anhydrous	Listed	Not listed	Not listed	Listed	Not listed	★ WARNING -Cancer - www.P65Warnings.ca.gov.

### Section 16 Other information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook

Form 06/2015 Revision Date: August 17 2022 Supercedes: September 22, 2020

Identification Section 1 Page E1 of E2

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**ALGINATE PLASTER** Product

Synonyms Snap 3 Alginate

Section 2 Hazards identification

Signal word: WARNING Pictograms: GHS08 Target organs: Lungs, Eyes



GHS Classification: \*STOT-RE (Category 2)

GHS Label information: Hazard statement:

\*H373: May cause damage to organs (lungs) through prolonged or repeated exposure (inhalation).

\* Respirable dust particles containing silicon dioxide may be generated by crushing. There are no known hazards associated with this material when used as recommended.

### Precautionary statement:

P260: Do not breathe dust.

P314: Get medical advice/attention if you feel unwell.

P501: Dispose of contents/container to a licensed chemical disposal agency in

accordance with local/regional/national regulations.

## Hazards not otherwise classified:

Health hazards not otherwise classified (HHNOC) - Not Known Physical hazards not otherwise classified (PHNOC) - Not Known

Section 3 Composition / information on ingredients						
Chemical Name	CAS#	%	EINECS			
Calcium sulfate Diatomaceous earth, flux calcined Cristobalite Quartz	7778-18-9 68855-54-9 14464-46-1 14808-60-7	Not available Not available Not available Not available	231-900-3 272-489-0 238-455-4 238-878-4			

### Section 4 First aid measures

INGESTION: Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: RESPIRABLE CRYSTALLINE SILICA MAY BE HARMFUL IF INHALED. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

### Section 5 Fire fighting measures

Suitable Extinguishing Media: Use any media suitable for extinguishing supporting fire

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Dust dispersed in air is capable of creating a dust explosion when exposed to an ignition source. Avoid dispersion of dust in air.

### Accidental release measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Minimize dust generation and accumulation. Use a dust suppressant such as water. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Section 7 Handling and storage Page E2 of E2

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before

Conditions for Safe Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Minimize dust generation.

Section 8	Exposure controls / personal protection						
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)			
	Silica, crystalline, cristobalite & $\alpha$ -quartz	TWA: 0.025 mg/m <sup>3</sup> (A2) respirable	Not listed	TWA: 0.05 mg/m <sup>3</sup> respirable			

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

## Section 9 Physical and chemical properties

Appearance: Solid. Fluffy white powder

Odor: No odor.

Odor threshold: Data not available

pH: Data not available

Melting / Freezing point: Data not available Boiling point: Data not available

Flash point: Data not available

Evaporation rate ( = 1): Data not available Flammability (solid/gas): Data not available. Explosion limits: Lower / Upper: Data not available Vapor pressure (mm Hg): Data not available

Vapor density (Air = 1): Data not available Relative density (Specific gravity): 0.3 g/cm<sup>3</sup> Solubility(ies): Partially soluble in water Partition coefficient: Data not available
Auto-ignition temperature: Data not available
Decomposition temperature: Data not available.

Viscosity: Data not available. Molecular formula: Mixture Molecular weight: Mixture

# Section 10 Stability and reactivity

Chemical stability: Stable Hazardous polymerization: Will not occur.

Conditions to avoid: High humidity and water contamination will cause material to gel. Prolonged exposure to heat greater than 60°C (140°F).

Incompatible materials: Hydrofluoric acid.

Hazardous decomposition products: None known.

## Section 11 Toxicological information

Acute toxicity: Data not available

Skin corrosion/irritation: Data not available Serious eye damage/irritation: Data not available Respiratory or skin sensitization: Data not available

**Germ cell mutagenicity:** Data not available **Carcinogenity:** Data not available NTP: Known to be a human carcinogen.

IARC classified: Group 1: Carcinogenic to humans.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. Ca Prop 65: 
WARNING! This product can expose you to a chemical, crystalline silica, which is known to the State of California to cause cancer.

Reproductive toxicity: Data not available

**STOT-single exposure**: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory effects **STOT-repeated exposure**: The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2 with respiratory effects

Aspiration hazard: Data not available

Potential health effects:

Inhalation: May be harmful if inhaled. May cause irritation and soreness in throat and nose. In extreme exposures some congestion may occur.

Ingestion: No hazard expected.
Skin: No hazard expected.

Eyes: Temporary irritation or inflammation.

Signs and symptoms of exposure: Respiratble dust from this product may contain up to 50% free crystalline silica (Cristobalite). As such it represents a risk to the respiratory system. Long term, unprotected exposure to dust levels in excess of the TLV may cause lung disease. Crystalline silica is also a known cause of silicosis, a non-cancerous

lung disease.

Additional information: RTECS #: VV7325000 [Cristobalite]

## Section 12 Ecological information

Toxicity to fish: No data available

Toxicity to daphnia and other aquatic invertebrates: No data available

Toxicity to algae: No data available

Persistence and degradability: No data available

Mobility in soil: No data available

PBT and vPvB assessment: No data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

## Section 13 Disposal considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

## Section 14 Transport information

UN/NA number: Not applicable Shipping name: Not Regulated

Hazard class: Not applicable Packing group: Not applicable Reportable Quantity: No Marine pollutant: No

Exceptions: Not applicable 2020 ERG Guide # Not applicable

## Section 15 Regulatory information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Diatomaceous earth	Listed	Not listed	Not listed	Listed	Not listed	⚠ WARNING -Cancer - www.P65Warnings.ca.gov.
Calcium sulfate	Listed	Not listed	Not listed	Listed	Not listed	

# Section 16 Other information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

Form 06/2015 Revision Date: November 22, 2022 Supercedes: October 29, 2020