

ISSUE DATE 8/16/2019
REVIEWED ON 8/16/2019

SAFETY DATA SHEET

OSHA HAZCOM STANDARD 29 CFR 1910.1200(G) AND GHS REV 03



CLS DENSIFIER

ADVANCED BLEND OF REACTIVE
NANO-MOLECULAR PARTICLES & LITHIUM SILICATE
HARDENERS & DENSIFIERS FOR CONCRETE

40 GROSSETT DRIVE, SUITE 200, KIRKWOOD, NY 13795
1 (800) 475-1975 • (607) 775-1948 • WWW.TRINIC.US • @TRINICLLC   

1. IDENTIFICATION

PRODUCT IDENTIFIER

- **Trade Name:** CLS Densifier
- **Relevant identified uses of the substance or mixture and uses advised against:**
- **Product Description:** No further relevant information available

DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET:

Manufacturer/Supplier:

Trinic LLC.
 40 Grosset Drive, Suite 200
 Kirkwood, NY 13795
 www.TRINIC.us
 (800) 475-1975 - toll free (US only)

Emergency telephone number:

Chemtrec (US): (800) 424-9300
 Chemtrec (outside US): (703) 527-3887 (collect calls accepted)

2. HAZARD(S) IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE



Skin Irrit. 2
 Eye Irrit. 2A

H315 Causes skin irritation
 H319 Causes serious eye irritation.

LABEL ELEMENTS

- **Hazard pictograms:**



- **Signal word:** Warning
- **Hazard-determining components of labeling:** Silicic Acid, Lithium Salt; Lithium Silicate
- **Hazard statements:**
 H315 - Causes skin irritation.
 H319 - Causes serious eye irritation.

2. HAZARD(S) IDENTIFICATION (CONT.)

- **Precautionary statements:**

P264 - Wash thoroughly after handling.

P280 - Wear protective gloves / eye protection / face protection.

P302+P352 - If on skin: Wash with plenty of water.

P321 - Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

P362+P364 - Take off contaminated clothing and wash it before reuse.

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

UNKNOWN ACUTE TOXICITY

This value refers to knowledge of known, established toxicological or ecotoxicological values. 5% of the mixture consists of component(s) of unknown toxicity.

CLASSIFICATION SYSTEM

NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme

- **NFPA ratings (scale 0 - 4)**



Health = 2
Fire = 0
Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



Health = *2
Fire = 0
Physical Hazard = 0

HAZARD(S) NOT OTHERWISE CLASSIFIED (HNOC)

None known




3. COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL CHARACTERIZATION

Mixtures

DESCRIPTION

Mixture of substances listed below with non-hazardous additions.

DANGEROUS COMPONENTS		
12627-14-4	Silicic Acid, Lithium Salt; Lithium Silicate -----  Eye Dam. 1, H318;  STOT SE 3, H335	2 - 12%
7631-86-9	Silicon Dioxide -----  Skin Irrit. 2, H315; STOT SE 3, H335; Eye Irrit. 2B, H320	2 - 12%

ADDITIONAL INFORMATION

The exact percentages of the ingredients of this mixture are considered to be proprietary and are withheld in accordance with the provisions of paragraph (i) of §1910.1200 of 29 CFR 1910.1200 Trade Secrets.

4. FIRST-AID MEASURES

DESCRIPTION OF FIRST AID MEASURES

- **General information:** Symptoms of poisoning may occur after exposure to dust, fumes or particulates; seek medical attention if feeling unwell.
- **After inhalation:** Supply fresh air. If required, provide artificial respiration. Consult doctor if symptoms persist. In case of unconsciousness place patient stably in the side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly. If skin irritation occurs, consult a doctor.
- **After eye contact:** Rinse opened eye for at least 15 minutes under running water. If symptoms persist, consult a doctor. If easy to do so, remove contact lenses if worn. If eye irritation occurs, consult a doctor.
- **After swallowing:** If swallowed and symptoms occur, consult a doctor.

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

No further relevant information available.

INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

No further relevant information available.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents:** No further relevant information.

SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

No further relevant information available.

ADVICE FOR FIREFIGHTERS

- **Special protective equipment for firefighters:** As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Not required.

ENVIRONMENTAL PRECAUTIONS

Dilute with plenty of water.

Do not allow to enter sewers/surface or ground water.

METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

Dispose of the collected material according to regulations.

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.

PROTECTIVE ACTION CRITERIA FOR CHEMICALS

- **PAC-1:**
7631-86-9 Silicon Dioxide 18 mg/m³
- **PAC-2:**
7631-86-9 Silicon Dioxide 740 mg/m³
- **PAC-3:**
7631-86-9 Silicon Dioxide 4,500 mg/m³

7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

- Ensure good ventilation/exhaustion at the workplace.
- Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.

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:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.

SPECIFIC END USE(S)

No further relevant information available.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ADDITIONAL INFORMATION ABOUT DESIGN OF TECHNICAL SYSTEMS:

No further data; see section 7.

CONTROL PARAMETERS

- **Components with occupational exposure limits:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

ADDITIONAL INFORMATION

The lists that were valid during the creation of this SDS were used as basis.

EXPOSURE CONTROLS

GENERAL PROTECTIVE AND HYGIENIC MEASURES

- The usual precautionary measures for handling chemicals should be followed.
- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing and wash before reuse.
- Wash hands before breaks and at the end of work.
- Avoid contact with the eyes and skin.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION (CONT.)

PERSONAL PROTECTIVE EQUIPMENT

- **Breathing equipment:** Not required.
- **Protection of hands:**



Protective gloves

Material of gloves: The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material: The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.

- **Eye protection:**



Tightly sealed goggles

LIMITATION AND SUPERVISION OF EXPOSURE INTO THE ENVIRONMENT

None

9. PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

- **Appearance:**
 - Form: Liquid
 - Color: Clear
- **Odor:** Odorless
- **Odor threshold:** Not determined
- **pH-value @ 20 °C (68 °F):** 11
- **Change in condition:**
 - Melting point/Melting range: 0°C (32°F)
 - Boiling point/Boiling range: ≥100°C (≥212°F)
- **Flash point:** None

9. PHYSICAL AND CHEMICAL PROPERTIES (CONT.)

• Flammability (solid, gaseous):	Not applicable
• Ignition temperature:	Not applicable
• Decomposition temperature:	Not determined
• Auto igniting:	Product is not self-igniting
• Danger of explosion:	Product does not present an explosion hazard
• Explosion limits:	
Lower:	Not determined
Upper:	Not determined
• Vapor pressure @ 20°C (68°F):	≤23 hPa (≤17.3 mm Hg)
• Density @ 20°C (68°F):	1.05 g/cm ³ (8.7623 lbs/gal)
Relative density:	Not determined
Vapor density:	Not determined
Evaporation rate:	Not determined
• Solubility in / Miscibility with:	
Water:	Fully miscible
• Partition coefficient (n-octanol/water):	Not determined
• Viscosity:	
Dynamic:	Not determined
Kinematic:	Not determined
• Solvent content:	
VOC content:	0.00 %

OTHER INFORMATION

No further relevant information available.

10. STABILITY AND REACTIVITY

REACTIVITY

No further relevant information available.

CHEMICAL STABILITY

THERMAL DECOMPOSITION / CONDITIONS TO BE AVOIDED

No decomposition if used according to specifications.

POSSIBILITY OF HAZARDOUS REACTIONS

No dangerous reactions known.

CONDITIONS TO AVOID

No further relevant information available.

INCOMPATIBLE MATERIALS

No further relevant information available.

HAZARDOUS DECOMPOSITION PRODUCTS

No dangerous decomposition products known.

11. TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

- Acute toxicity:

LD/LC50 VALUES THAT ARE RELEVANT FOR CLASSIFICATION		
7631-86-9 Silicon Dioxide		
Oral	LD50	10,000 mg/kg (Rat) (OECD 401)
Dermal	LD50	5,000 mg/kg (Rabbit) (OECD 402)
Inhalative	LC50/4 h	>140->2,000 mg/l (Rat) (OCED 403) Maximum attainable concentration, mortality does not appear. 10,000 mg/l (Zebra fish) (OECD 203)

11. TOXICOLOGICAL INFORMATION (CONT.)

- **Primary irritant effect:**
On the skin: Irritant to skin and mucous membranes.
On the eye: Irritating effect.
- **Additional toxicological information:** The product shows the following dangers according to internally approved calculation methods for preparations:
 Irritant
- **Carcinogenic categories:**
IARC (International Agency for Research on Cancer)
 Group 1 - Carcinogenic to humans
 Group 2A - Probably carcinogenic to humans
 Group 2B - Possibly carcinogenic to humans
 Group 3 - Not classifiable as to its carcinogenicity to humans
 Group 4 - Probably not carcinogenic to humans

7631-86-9	Silicon Dioxide	3
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- **NTP (National Toxicology Program):** None of the ingredients are listed.
- **OSHA-Ca (Occupational Safety & Health Administration):** None of the ingredients are listed.

12. ECOLOGICAL INFORMATION

TOXICITY

AQUATIC TOXICITY	
7631-86-9 Silicon Dioxide	
EC50	>1,000 mg/l (Daphnia) (OECD 202)

PERSISTENCE AND DEGRADABILITY

No further relevant information available.

BIOACCUMULATIVE POTENTIAL

No further relevant information available.

MOBILITY IN SOIL

No further relevant information available.

12. ECOLOGICAL INFORMATION (CONT.)

ADDITIONAL ECOLOGICAL INFORMATION

- **General notes:**
Do not allow undiluted product or product that has not been neutralized to reach ground water, water course, or sewage system.
- **Results of PBT and vPvB assessment:**
PBT: Not applicable.
vPvB: Not applicable.
- **Other adverse effects:** No further relevant information available.

13. DISPOSAL CONSIDERATIONS

WASTE TREATMENT METHOD RECOMMENDATION

Observe all federal, state and local environmental regulations when disposing of this material.

UNCLEANED PACKAGING RECOMMENDATION

Disposal must be made according to official regulations.

RECOMMENDED CLEANSING AGENT

Water, if necessary with cleansing agents.

14. TRANSPORT INFORMATION

- | | |
|---|------------------------|
| <ul style="list-style-type: none"> • UN-Number:
DOT, ADR/ADN, IMDG, IATA | Non-Regulated Material |
| <ul style="list-style-type: none"> • UN proper shipping name:
DOT, ADR/ADN, IMDG, IATA | Non-Regulated Material |
| <ul style="list-style-type: none"> • Transport hazard class(es):
DOT, ADR/ADN, ADN, IMDG, IATA Class | Non-Regulated Material |
| <ul style="list-style-type: none"> • Packing group:
DOT, ADR/ADN, IMDG, IATA | Non-Regulated Material |
| <ul style="list-style-type: none"> • Environmental hazards: | Not applicable. |
| <ul style="list-style-type: none"> • Special precautions for user: | Not applicable. |
| <ul style="list-style-type: none"> • Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: | Not applicable. |
| <ul style="list-style-type: none"> • UN “Model Regulation”: | Non-Regulated Material |

15. REGULATORY INFORMATION

SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

SARA (SUPERFUND AMENDMENTS AND REAUTHORIZATION)

- **Section 355 (extremely hazardous substances):** None of the ingredients are listed.
- **Section 313 (Specific toxic chemical listings):** None of the ingredients are listed.
- **TSCA (Toxic Substances Control Act):** All components have the value ACTIVE.
- **Hazardous Air Pollutants:** None of the ingredients are listed.

CALIFORNIA PROPOSITION 65

- **Chemicals known to cause cancer:** None of the ingredients are listed.
- **Chemicals known to cause reproductive toxicity for females:** None of the ingredients are listed.
- **Chemicals known to cause reproductive toxicity for males:** None of the ingredients are listed.
- **Chemicals known to cause developmental toxicity:** None of the ingredients are listed.
- **New Jersey Right-to-Know List:** None of the ingredients are listed.
- **New Jersey Special Hazardous Substance List:** None of the ingredients are listed.
- **Pennsylvania Right-to-Know List:** 7631-86-9 Silicon Dioxide
- **Pennsylvania Special Hazardous Substance List:** None of the ingredients are listed.

CARCINOGENIC CATEGORIES

- **EPA (Environmental Protection Agency):** None of the ingredients are listed.
- **TLV (Threshold Limit Value established by ACGIH):** None of the ingredients are listed.
- **NIOSH-Ca (National Institute for Occupational Safety and Health):** None of the ingredients are listed.

15. REGULATORY INFORMATION (CONT.)**GHS LABEL ELEMENTS**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms:**



- **Signal word:** Warning
- **Hazard-determining components of labeling:** Silicic Acid, Lithium Salt; Lithium Silicate

- **Hazard statements:**

H315 Causes skin irritation.

H319 Causes serious eye irritation.

- **Precautionary statements:**

P201	Obtain special instructions before use.
P264	Wash thoroughly after handling.
P280	Wear protective gloves / eye protection / face protection.
P302+P352	If on skin: Wash with plenty of water.
P321	Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).
P305+P351+P338	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P337+P313	If eye irritation persists: Get medical advice/attention.
P501	Dispose of contents/container in accordance with local/regional national/international regulations.

NATIONAL REGULATIONS

None of the ingredients are listed.

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16. OTHER INFORMATION

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

DATE OF LAST REVISION / REVISION NUMBER: 08/16/2019 / 2

ABBREVIATIONS AND ACRONYMS

- ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road
- ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
- IMDG: International Maritime Code for Dangerous Goods
- DOT: US Department of Transportation
- IATA: International Air Transport Association
- ACGIH: American Conference of Governmental Industrial Hygienists
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- NFPA: National Fire Protection Association (USA)
- HMIS: Hazardous Materials Identification System (USA)
- VOC: Volatile Organic Compounds (USA, EU)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- NIOSH: National Institute for Occupational Safety and Health
- OSHA: Occupational Safety & Health Administration
- TLV: Threshold Limit Value
- PEL: Permissible Exposure Limit
- REL: Recommended Exposure Limit
- Skin Irrit. 2: Skin corrosion/irritation – Category 2
- Eye Dam. 1: Serious eye damage/eye irritation – Category 1
- Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
- Eye Irrit. 2B: Serious eye damage/eye irritation – Category 2B
- STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

* Data compared to the previous version altered.