SAFETY DATA SHEET

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



CS DENSIFYING ADDITIVE

COLLOIDAL SILICA CONCENTRATE

ACCELERATES EARLY STRENGTH GAIN OF CONCRETE WITH MINIMAL EFFECT ON INITIAL SET

IMPROVES THE BOND BETWEEN CEMENT MIX & AGGREGATES

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: CS Additive
- 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

The product does not need classification according to OSHA HazCom Standard 29 CFR paragraph (d) of §1910.1200(g) and GHS Rev 03.

LABEL ELEMENTS

- Hazard pictograms: Non-regulated material
- Signal word: Non-regulated material
- Hazard statements: Non-regulated material

UNKNOWN ACUTE TOXICITY

This value refers to knowledge of known, established toxicological or ecotoxicological values.

2. HAZARD(S) IDENTIFICATION (CONT.)

CLASSIFICATION SYSTEM

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

• NFPA ratings (scale 0 - 4)



Health = 0 Fire = 0 Reactivity = 0

• HMIS-ratings (scale 0 - 4)



Health = 0 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		
7631-86-9	Silicon Dioxide	
	\$\ightarrow\$ Skin Irrit. 2, H315; STOT SE 3, H335; Eye Irrit. 2B, H320	45 - 55%

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. No special measures required.
- 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: If skin irritation occurs, consult a doctor.
- After eye contact: If eye irritation occurs, consult a doctor. Rinse opened eye for several minutes under running water.
- 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

No special measures required.

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:

• PAC-2:		
1310-73-2	Sodium Hydroxide	0.5 mg/m ³
7631-86-9	Silicon Dioxide	18 mg/m³

• PAC-2

7631-86-9	Silicon Dioxide	740 mg/m ³
1310-73-2	Sodium Hydroxide	5 mg/m³

• PAC-3:

7631-86-9	Silicon Dioxide	4,500 mg/m ³
1310-73-2	Sodium Hydroxide	50 mg/m³

7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

- · No special measures required.
- 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.

PERSONAL PROTECTIVE EQUIPMENT

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

Material of gloves: Not applicable.

Penetration time of glove material: Not applicable.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION (CONT.)

· Eye protection:



Goggles recommended during refilling.

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: White

• Odor: No data available

Odor threshold:
 Not determined

• pH-value @ 20°C (68°F): 9-11

· Change in condition:

Melting point/Melting range: 0°C (32°F)

Boiling point/Boiling range: ≥100°C (≥212°F)

• Flash point: None

• Flammability (solid, gaseous): Not applicable

• Ignition temperature: >370°C (>698°F)

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 @ 25°C (77°F): 32.1 hPa (24.1 mm Hg)

9. PHYSICAL AND CHEMICAL PROPERTIES (CONT.)

• **Density @ 20°C (68°F):** 1.3-1.4 g/cm³ (10.8485-11.683 lbs/gal)

Relative density:

Vapor density:

Not determined

Evaporation rate:

Not determined

· Solubility in / Miscibility with:

Water: 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)

· Primary irritant effect:

On the skin: No irritating effect. On the eye: No irritating effect.

- Additional toxicological information: The product is not subject to classification according to internally approved calculation methods for preparations. When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.
- 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.

ADDITIONAL ECOLOGICAL INFORMATION

General notes:

Generally not hazardous for water.

· 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

Smaller quantities can be disposed of with household waste. Observe all federal, state and local environmental regulations when disposing of this material.

UNCLEANED PACKAGING RECOMMENDATION

Disposal must be made according to official regulations.

14. TRANSPORT INFORMATION

· UN-Number:

DOT, ADR/ADN, IMDG, IATA Non-Regulated Material

UN proper shipping name:

DOT, ADR/ADN, IMDG, IATA Non-Regulated Material

Transport hazard class(es):

DOT, ADR/ADN, ADN, IMDG, IATA Class Non-Regulated Material

Packing group:

DOT, ADR/ADN, IMDG, IATA Non-Regulated Material

· Environmental hazards: Not applicable.

· Special precautions for user: Not applicable.

 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:

Not applicable.

 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.

15. REGULATORY INFORMATION (CONT.)

New Jersey Right-to-Know List:

1310-73-2 Sodium Hydroxide

New Jersey Special Hazardous Substance List:

1310-73-2 Sodium Hydroxide CO, R1

• Pennsylvania Right-to-Know List:

7631-86-9 Silicon Dioxide 1310-73-2 Sodium Hydroxide

Pennsylvania Special Hazardous Substance List:

1310-73-2 Sodium Hydroxide

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.

GHS LABEL ELEMENTS

Non-regulated material

- Hazard pictograms: Non-regulated material
- Signal word: Non-regulated material
- Hazard statements: Non-regulated material

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 / 1

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 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.