

ISSUE DATE 8/19/2019
REVIEWED ON 8/19/2019

SAFETY DATA SHEET

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



HYDRATION STABILIZER

ADVANCED READY TO USE POWDERED INITIAL SET RETARDER

**MAKES MORE UNIFORM AND PREDICTABLE
HIGH/ULTRA-HIGH PERFORMANCE GLASS FIBER
REINFORCED CONCRETE, ENGINEERED CEMENTITIOUS
COMPOSITE CONCRETE, & WET CAST 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:** Hydration Stabilizer
- **Product Number:** Trinic Hydration Stabiliz
- **Relevant identified uses of the substance or mixture and uses advised against:**
- **Product Description:** Concrete powdered admixture

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



Health hazard

Carc. 1A

H350 May cause cancer.

STOT RE 1

H372 Causes damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalation.



Skin Irrit. 2

H315 Causes skin irritation.

Eye Irrit. 2A

H319 Causes serious eye irritation.

LABEL ELEMENTS

- **Hazard pictograms:**



- **Signal word:** Danger

2. HAZARD(S) IDENTIFICATION (CONT.)

- **Hazard-determining components of labeling:**

Quartz (SiO₂)

Titanium Dioxide

- **Hazard statements:**

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

H350 - May cause cancer.

H372 - Causes damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalation.

- **Precautionary statements:**

P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P260 - Do not breathe dust/fume/gas/mist/vapors/spray.regulations.

P264 - Wash thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

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

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

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

P308+P313 - IF exposed or concerned: Get medical advice/attention.

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

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

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

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

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

P405 - Store locked up.

P501 - Dispose of contents/container in accordance with local/regional/national/international regulations.

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 = 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		
CAS: 77-92-9 RTECS: GE 7350000	Citric Acid ----- ⚠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319	25 - 50%
CAS: 14808-60-7 RTECS: VV 7330000	Quartz (SiO ₂) ----- ⚠ Carc. 1A, H350; STOT RE 1, H372; ⚠ Acute Tox. 4, H332; STOT SE 3, H335; Eye Irrit. 2B, H320	14%
CAS: 13463-67-7	Titanium Dioxide ----- ⚠ Carc. 2, H351	≤2.5%

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

Quartz: Can cause silicosis, a fibrosis (scarring) of the lungs. Silicosis may be progressive; it may lead to disability and death; inhaled from occupational sources is classified as carcinogenic to humans. Some studies show in workers exposed to respirable quartz excess numbers of cases of scleroderma, connective tissue disorders, lupus, rheumatoid arthritis, chronic kidney diseases and end-stage kidney disease, chronic bronchitis and emphysema.

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

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

METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

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:**

14808-60-7	Quartz (SiO ₂)	0.075 mg/m ³
13463-67-7	Titanium Dioxide	30 mg/m ³

- **PAC-2:**

14808-60-7	Quartz (SiO ₂)	33 mg/m ³
13463-67-7	Titanium Dioxide	330 mg/m ³

- **PAC-3:**

14808-60-7	Quartz (SiO ₂)	200 mg/m ³
13463-67-7	Titanium Dioxide	2,000 mg/m ³

7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

- Avoid creating and breathing dust/fume/gas/mist/vapors/spray.
- Ensure good ventilation/exhaustion at the workplace.
- **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 following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the remaining constituents have no known exposure limits.

14808-60-7 Quartz (SiO ₂)	
PEL	Long-term value: 0.05* mg/m ³ *resp. dust; 30mg/m ³ /%SiO ₂ +2
REL	Long-term value: 0.05* mg/m ³ *respirable dust; See Pocket Guide App. A
TLV	Long-term value: 0.025* mg/m ³ *as respirable fraction
13463-67-7 Titanium Dioxide	
PEL	Long-term value: 15* mg/m ³ *total dust
REL	See Pocket Guide App. A
TLV	Long-term value: 10 mg/m ³

8. EXPOSURE CONTROLS / PERSONAL PROTECTION (CONT.)

ADDITIONAL INFORMATION

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

EXPOSURE CONTROLS

GENERAL PROTECTIVE AND HYGIENIC MEASURES

- 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.

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: Powder
 - Color: Tan
- **Odor:** Earthy
- **Odor threshold:** Not determined
- **pH-value @ 20°C (68°F):** 4 - 8
- **Change in condition:**
 - Melting point/Melting range: 307°C (584.6°F)
 - Boiling point/Boiling range: Not determined
- **Flash point:** None
- **Flammability (solid, gaseous):** Not determined
- **Ignition temperature:** $\geq 1,010^{\circ}\text{C}$ ($\geq 1,850^{\circ}\text{F}$)
- **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 @ 1732°C (3,149.6°F):** ≤ 13.5 hPa (≤ 10.1 mm Hg)
- **Density @ 20°C (68°F):**
 - Bulk density: 2.021 g/cm³ (16.8652 lbs/gal)
 - 1,700 kg/m³
 - Relative density: Not determined
 - Vapor density: Not applicable
 - Evaporation rate: Not applicable
- **Solubility in / Miscibility with:**
 - Water: Soluble
- **Partition coefficient (n-octanol/water):** Not determined

9. PHYSICAL AND CHEMICAL PROPERTIES (CONT.)

- **Viscosity:**

Dynamic: Not applicable

Kinematic: Not applicable

- **Solvent content:**

Organic solvents: 0.00 %

VOC content: 100.0 %

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

Contact with fluorine, oxygen difluoride, and chlorine trifluoride will cause fire.

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		
77-92-9 Citric Acid		
Oral	LD50	5,040 mg/kg (Mouse) 5,400 mg/kg (Rat)
Dermal	LD50 LC50 / 48 hrs	>2,000 mg/kg (Rat) 440 mg/l (Daphnia)
14808-60-7 Quartz (SiO₂)		
Oral	LD50	>22,500 mg/kg (Rat) mg/kg (Rabbit)
Inhalative	LC50 / 96 hrs	1,033 mg/l (Trout)
13463-67-7 Titanium Dioxide		
Oral	LD50	13463-67-7 Titanium Dioxide
Dermal	LD50	>10,000 mg/kg (Rabbit)
Inhalative	LC50 4 hrs	>6.82 mg/l (Rat)

- **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

11. TOXICOLOGICAL INFORMATION (CONT.)

• **Carcinogenic categories:**

IARC (International Agency for Research on Cancer):

“In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However in making the overall evaluation, IARC noted that “carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs.” (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicate dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.) In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. “There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk.” (SCOEL SUM Doc 94-final, June 2003) According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. May cause cancer. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled”

(a) Although IARC has classified titanium dioxide as possible carcinogenic to human (2B), their summary concludes: “No significant exposure to titanium dioxide is thought to occur during the use of products which titanium dioxide is bound to other materials, such as in cosmetics or in paints.”

(b) OSHA does not regulate Titanium Dioxide as a carcinogen. However, under 29 CFR 1910.1200 the SDS must convey the fact that Titanium Dioxide is a potential carcinogen to rats.

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

14808-60-7	Quartz (SiO ₂)	1
13463-67-7	Titanium Dioxide	2B

• **NTP (National Toxicology Program):**

14808-60-7	Quartz (SiO ₂)	K
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• **OSHA-Ca (Occupational Safety & Health Administration):** None of the ingredients are listed.

12. ECOLOGICAL INFORMATION**TOXICITY**

AQUATIC TOXICITY	
77-92-9 Citric Acid	
EC50	1,534 mg/l (Daphnia)
14808-60-7 Quartz (SiO ₂)	
EC50	218 mg/l (Green algae)
13463-67-7 Titanium Dioxide	
EC50	>1,000 mg/l (Water flea)

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:**

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

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. 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

- **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:**
 - 14808-60-7 Quartz (SiO₂)
 - 13463-67-7 Titanium Dioxide
- **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:**
 - 14808-60-7 Quartz (SiO₂)
 - 13463-67-7 Titanium Dioxide
- **New Jersey Special Hazardous Substance List:** 14808-60-7 Quartz (SiO₂)
- **Pennsylvania Right-to-Know List:**
 - 14808-60-7 Quartz (SiO₂)
 - 13463-67-7 Titanium Dioxide
- **Pennsylvania Special Hazardous Substance List:** None of the ingredients are listed.

15. REGULATORY INFORMATION (CONT.)

CARCINOGENIC CATEGORIES

- **EPA (Environmental Protection Agency):** None of the ingredients are listed.
- **TLV (Threshold Limit Value established by ACGIH):**

14808-60-7	Quartz (SiO ₂)	A2
13463-67-7	Titanium Dioxide	A4
- **NIOSH-Ca (National Institute for Occupational Safety and Health):**

14808-60-7	Quartz (SiO ₂)
13463-67-7	Titanium Dioxide

GHS LABEL ELEMENTS

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

- **Hazard pictograms:**



- **Signal word:** Danger
- **Hazard-determining components of labeling:**
Quartz (SiO₂)
Titanium Dioxide
- **Hazard statements:**
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H350 May cause cancer.
H372 Causes damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalation.

15. REGULATORY INFORMATION (CONT.)**• Precautionary statements:**

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	If on skin: Wash with plenty of water.
P305+P351+P338	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P321	Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).
P314	Get medical advice/attention if you feel unwell.
P362+P364	Take off contaminated clothing and wash it before reuse.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P405	Store locked up.
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: 08/19/2019 / 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
- Acute Tox. 4: Acute toxicity – Category 4
- Skin Irrit. 2: Skin corrosion/irritation – Category 2
- Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
- Eye Irrit. 2B: Serious eye damage/eye irritation – Category 2B
- Carc. 1A: Carcinogenicity – Category 1A
- Carc. 2: Carcinogenicity – Category 2
- STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
- STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

* Data compared to the previous version altered.