



SAFETY DATA SHEET

DH 4 - Concrete Densifier and hardener

Issue Date 01-May-2017

1. IDENTIFICATION

Product identifier

Product Name Concrete Restoration Products - DH 4 Concrete Densifier & Hardener

Other means of identification

Product Code

Recommended use of the chemical and restrictions on use

Recommended Use For Industrial Use

Details of the supplier of the safety data sheet

Supplier Address

Concrete Restoration Products, Inc
2626 Lavery Ct #302
Newbury Park Ca 91320

Company Phone Number 855-846-8277
24 Hour Emergency Phone Number Chemtrec 800-262-8200

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Globally Harmonized System of Classification and Labeling of Chemicals
GHS07



Acute Tox. 4 H302 Harmful if swallowed.
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2A H319 Causes serious eye irritation.
STOT SE 3 H335 May cause respiratory irritation.

- Label elements
 - GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
 - Hazard pictograms
- GHS07



- **Signal word** Warning
- Hazard-determining components of labeling:
Silicic acid, sodium salt

- **Hazard statements**
Harmful if swallowed.
Causes skin irritation.
Causes serious eye irritation.
May cause respiratory irritation.

- Precautionary statements
- Avoid breathing dust/fume/gas/mist/vapors/spray
- Wash thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Wear protective gloves / eye protection / face protection.
- If swallowed: Call a poison center/doctor if you feel unwell.
- Rinse mouth.
- If on skin: Wash with plenty of water.
- Specific treatment (see on this label).
- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
- Continue rinsing.
- If skin irritation occurs: Get medical advice/attention.
- Take off contaminated clothing and wash it before reuse.
- If eye irritation persists: Get medical advice/attention.
- Store in a well-ventilated place. Keep container tightly closed.
- Store locked up.
- Dispose of contents/container in accordance with local/regional/national/international regulations.
- Classification system:
- NFPA ratings (scale 0 - 4)



Health = 2
 Fire = 0
 Reactivity = 0

- The substance possesses oxidizing properties.
- HMIS-ratings (scale 0 - 4)

Health	2
Fire	0
Reactivity	0

Health = 2
 Fire = 0
 Reactivity = 0

- Other hazards
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

3. COMPOSITION/INFORMATION ON INGREDIENTS

- Chemical characterization: Mixtures
 - Description: Mixture of the substances listed below with nonhazardous additions.
 - Dangerous components:
- | | | |
|---------------------------|-----------|---------|
| Silicic acid, sodium salt | 1344-09-8 | 30%-35% |
|---------------------------|-----------|---------|

4. FIRST AID MEASURES

4.1. Description of first aid measures

- General information:
- Immediately remove any clothing soiled by the product.
- In case of irregular breathing or respiratory arrest provide artificial respiration.
- After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: If swallowed, seek medical advice immediately and show this container or label.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed - None known
- Indication of any immediate medical attention and special treatment needed - None known

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

- | | |
|---------------------------------|---|
| Suitable extinguishing media: | Water spray, foam, CO ₂ , dry powder., Adapt fire-extinguishing measures to surroundings |
| Unsuitable extinguishing media: | Do not use full-force water jet in order to avoid dispersal and spread of the fire. |

5.2. Special hazards arising from the substance or mixture

None known.

The product itself does not burn.

5.3. Advice for firefighters

As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Not required.

- Environmental precautions:

Do not allow product to reach storm sewer system or ground water

Inform respective authorities in case of seepage into water course or sewage system. Dilute with plenty of water.

- Methods and material for containment and cleaning up:

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

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

- Protective Action Criteria for Chemicals

- PAC-1: 1344-09-8 Silicic acid, sodium salt: 5.9 mg/m³

- PAC-2: 1344-09-8 Silicic acid, sodium salt: 65 mg/m³

- PAC-3: 1344-09-8 Silicic acid, sodium salt: 390 mg/m³

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Use with adequate ventilation. Avoid breathing vapor, aerosol or mist. Do not swallow product. Keep container tightly closed. Wash thoroughly after handling. Handle in accordance with good industrial hygiene and safety practice. FOR INDUSTRIAL USE ONLY General mechanical room ventilation is expected to be satisfactory if handled at low temperatures or in covered equipment. Local ventilation is needed in the presence of airborne mists.

7.2. Conditions for safe storage, including any incompatibilities

Storage

Keep containers tightly closed in a dry, cool place.

Further information

Product may freeze if stored below 32°F. Product damage will occur if frozen.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

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

8.2. Exposure controls

Personal protective equipment

Respiratory protection

A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/provincial requirements must be followed whenever workplace conditions warrant respirator use. NIOSH's "Respirator Decision Logic" may be useful in determining the suitability of various types of respirators.

Hand protection

Use impermeable gloves.

The rupture time and material thickness data are guideline values! Exact rupture time / material thickness data can be obtained from the protective glove manufacturer. Suitability for specific workplaces should be clarified with protective glove manufacturers. The above mentioned hand protection is based on knowledge of the chemistry and anticipated uses of this product but it may not be appropriate for all workplaces. A hazard assessment should be conducted prior to use to ensure suitability of gloves for specific work environments and processes prior to use. Use impermeable gloves.

Skin and body protection

A safety shower and eye wash fountain should be readily available. To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29CFR1910.132) be conducted before using this product.

Hygiene measures

To ensure ideal skin protection: use super fatted soaps and skin cream for skin care. Wash contaminated clothing before re-use.

Protective measures

Handle in accordance with good industrial hygiene and safety practice. If there is the possibility of skin/eye contact, the indicated hand/eye/body protection should be used. If the workplace threshold limit value is exceeded and/or the substance is released, use appropriate respiratory protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	liquid
Color	clear
Form	liquid
Odor	odorless
Odor Threshold	no data available
pH	11.3 -11.6
Freezing point	0 °C
Boiling point/range	110 °C
Flash point	no data available
Evaporation rate	no data available
Flammability (solid, gas)	no data available
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Vapour pressure	23.33 hPa (20 °C) similar to water
Relative vapour density	no data available
Relative density	no data available
Water solubility	no data available
Partition coefficient: n-octanol/water	no data available
Autoignition temperature	no data available
Thermal decomposition	no data available
Viscosity, dynamic	no data available
Viscosity, kinematic	no data available

9.2. Other information

no data available

10. STABILITY AND REACTIVITY

10.1. Reactivity

Stable under recommended storage conditions.

10.2. Chemical stability

No dangerous reaction known under conditions of normal use.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions

See Sect. 10.1 Reactivity.

10.4. Conditions to avoid

Do not mix with other material unless advised by supplier. Freezing conditions will damage product.

10.5. Incompatible materials

Acidic, Cationic, and salt materials may gel the product

10.6. Hazardous decomposition products

None known.

Stable under normal conditions. Product will not undergo hazardous polymerization.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute oral toxicity

Acute toxicity estimate : > 5000 mg/kg

Method: Calculation method

Acute dermal toxicity

Acute toxicity estimate : > 5000 mg/kg

Method: Calculation method

Carcinogenicity assessment Further information

Contains no carcinogenic substances as defined by NTP, IARC and/or OSHA.

No toxicological tests have been conducted with the product itself.

Toxicological information on components

Silicon dioxide, amorphous

Acute oral toxicity

LD50 Rat: > 31600 mg/kg

Acute dermal toxicity

LD50 Rabbit: > 2000 mg/kg

12. ECOLOGICAL INFORMATION

12.1. Toxicity

No ecotoxicological data is available for this product.

Toxicity in aquatic invertebrates

EC50 Daphnia magna: > 10000 mg/l / 24 h

Test substance: Silicon dioxide, derived from chemical synthesis

Method: OECD 202

Toxicity to algae

IC 50 Desmodesmus subspicatus (green algae): > 10000 mg/l / 72 h

Test substance: Silicon dioxide, derived from chemical synthesis

Method: OECD 201

12.2. Persistence and degradability

Biodegradability

Inorganic product, Test of the biodegradability cannot be carried out.

12.3. Bioaccumulative potential

Bioaccumulation

Not to be expected.

12.4. Mobility in soil

Mobility

No remarkable mobility in soil is to be expected.

12.5. Other adverse effects

Further Information

Water hazard class 1 (Self-assessment): slightly hazardous for water

May cause or intensify fire; oxidizer. Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of

the product the aqueous waste, emptied into drains, is only low water-dangerous.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Product

Waste must be disposed of in accordance with federal, state, provincial and local regulations.

Since empty containers retain product residue, follow MSDS and label warnings even after container is emptied.

Do not allow product to reach storm water drains or ground water.

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

Uncleaned packaging

Packaging material should be recycled or disposed of in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

Not dangerous according to transport regulations.

- 14.1. UN number: --
14.2. UN proper shipping name: --
14.3. Transport hazard class(es): --
14.4. Packing group: --
14.5. Environmental hazards (Marine pollutant):--
14.6. Special precautions for user: Yes
Not dangerous according to transport regulations.

15. REGULATORY INFORMATION

Hazard statements

Harmful if swallowed.

Causes skin irritation.

Causes serious eye irritation.

May cause respiratory irritation.

- Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray

Wash thoroughly after handling.

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

Wear protective gloves / eye protection / face protection.

If swallowed: Call a poison center/doctor if you feel unwell.

Rinse mouth.

If on skin: Wash with plenty of water.

Specific treatment (see on this label).

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

If eye irritation persists: Get medical advice/attention.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

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

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

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Section 355 (extremely hazardous substances):
None of these ingredients listed.
- Section 313 (Specific toxic chemical listings):
None of these ingredients listed.
- TSCA (Toxic Substances Control Act):
All ingredients are listed.
- Proposition 65
- Chemicals known to cause cancer:
None of these ingredients are listed.
- Chemicals known to cause reproductive toxicity for females:
None of these ingredients are listed.
- Chemicals known to cause reproductive toxicity for males:
None of these ingredients are listed.
- Chemicals known to cause developmental toxicity:
None of these ingredients are listed.
- Carcinogenic categories
- EPA (Environmental Protection Agency)
None of these 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 these ingredients are listed.
- GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).



GHS07

- Signal word Warning
- Hazard-determining components of labeling:
Silicic acid, sodium salt

16. OTHER INFORMATION

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, **transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.**

End of Safety Data Sheet