



SAFETY DATA SHEET

Supreme Hard Densifier

REVISION: May 17, 2018
SUPERSEDES: JUNE 20, 2017
VERSION NO.: 2

Section 1: Product and Company Identification:

1.1 Product Identifier

Product Form: Mixture
Identification of Substance: Silicon Dioxide and Water
Product Name: Supreme Hard™ Densifier
Synonym: Colloidal Silica Sol
CAS Number: 7631-86-9
Index Number: Not available.
EINECS Number: 231-545-4
REACH Registration Number: 01-2119379499-16-0220
Formula: SiO₂

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended Use: Hardening Concrete. Polishing Concrete.
Restrictions on Use: For industrial use only, not for food, drug or home use.

1.3 Details of the supplier of the safety data sheet

Company Identification: Supreme Products, Inc.
9924 Universal Blvd. Suite 224-115, U.S.A.
888-203-6791
Email Contact: info@SupremeHard.com
Internet: <https://SupremeHard.com>

1.4 Emergency telephone number

In Case of Emergency: USA/Canada CHEMTREC: +1 (703) 527-3887
International CHEMTREC: +1 (703) 741-5970
24 Hours/Day: 7 Days/Week

Section 2: Hazard(s) Identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Not classified.

Classification according to Regulation (EC) No. 1272/2008 (CLP)

Not classified.

Classification according to Directive 67/548/EEC and 1999/45/EC (including amendments)

Not classified.

2.2 Label Elements

Not labelled.

Signal Word: Not applicable.

Hazard Pictogram: Not applicable.

Hazard Statement(s): Not applicable.

Precautionary Statement(s): Not applicable.

2.3 Other Hazards

Components do not meet the criteria for a PBT or vPvB substance.

2.4 Unknown acute toxicity (GHS US)

No information available.

Section 3: Composition / Information on Ingredients

Description: Mixture consisting of the following components.

Component Name:	Product Identifier	GHS Classification	Percent By Weight
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Germany	4 mg/m ³ (inhalable)	8 hours	Senate Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (MAK Commission): http://www.dfg.de/en/dfg_profile/statutory_bodies/senate/health_hazards/index.html
Belgium	10 mg/m ³	8 hours	Service public fédéral Emploi, Travail et Concentration sociale: http://www.emploi.belgique.be/WorkArea/showcontent.aspx?id=23914
Austria	2 mg/m ³ (inhalable)	8 hours	http://www.arbeitsinspektion.gv.at/NR/rdonlyres/F173280B-D4FB-44D2-8269-8DB2CB1D2078/0/GKV2011.pdf

8.1.2 DNELs and PNECs

Silicon Dioxide, CAS 7631-86-9

DNEL (Derived No Effect Level)

Route of Exposure/Environmental protection target	DNEL
Inhalation - Long term/systemic effects	4 mg/m ³

PNEC (Predicted No Effect Concentration)

No information available

8.2 Exposure Controls

Engineering Controls:	Ventilation adequate to meet occupational exposure limits.
Hygiene Measures:	Workers should wash exposed skin several times daily with soap and water. Soiled work clothing should be changed and laundered or dry-cleaned.
Respiratory:	Airborne concentrations should be kept to lowest levels possible. If vapor, mist or dust is generated and the occupational exposure limit of the product, or any component of the product, is exceeded, use appropriate NIOSH or MSHA approved air purifying or air supplied respirator after determining the airborne concentration of the contaminant. Air-supplied respirators should always be worn when airborne concentrations of the contaminant or oxygen content is unknown.
Hands:	Wear impervious gloves such as neoprene.
Eyes:	Safety glasses, chemical type goggles, or face shield recommended to prevent eye contact.
Skin:	Wear clean body-covering clothing; impervious gloves such as neoprene. Workers should wash exposed skin several times daily with soap and water. Soiled work clothing should be laundered or dry-cleaned.
Environmental Exposure Controls:	Adverse effects of this material on the environment have not been evaluated. Proper disposal techniques to isolate and recover material should be implemented.

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance (Physical State, Color):	Translucent to transparent white liquid. The product is a water-based material.
Upper/lower flammability or explosive limits:	Not determined.
Volatile by Weight:	83%
Odor:	Odorless.
Vapor Pressure:	2260 kPa (17 mm Hg) at 20°C water
Odor Threshold:	Not determined.
Vapor Density:	Not determined.
pH:	10.0
Relative Density:	Not determined.
Melting point/freezing point:	Not determined.



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Solubility in Water:	Disperses in water but is negligibly soluble.
Initial boiling point and boiling range:	100° C (212° F) water
Flashpoint:	Not applicable.
Evaporation Rate:	Slow (Butyl Acetate = 1)
Flammability (solid, gas):	Material will not burn in a fire.
Partition Coefficient:	Not determined.
Auto-ignition temperature:	Not determined.
Decomposition temperature:	Not determined.
Viscosity:	Less than 20 cP
Specific Gravity:	1.1
Freezing Point:	0°C (32° F) water
Explosion Limits:	Not applicable.
Oxidizing Properties:	Not an oxidizer.

9.2 Other information

Not applicable.

Section 10: Stability and Reactivity

10.1 Reactivity

Not determined.

10.2 Chemical Stability

Stable.

10.3 Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4 Conditions to avoid

No recommendation.

10.5 Incompatible materials

Not determined.

10.6 Hazardous decomposition products

Not determined.

Section 11: Toxicological Information

11.1 Information on toxicological effects

Acute toxicity:

LD50, Rat, Oral Values for classification:

Silicon Dioxide, 7631-86-9

3160 mg/kg

Skin corrosion/irritation:

Avoid contact with skin, may cause skin irritation or dryness.

Eye damage / eye irritation

Avoid contact with eyes, may cause irritation.

Inhalation:

Use breathing protection when aerosol or mist is formed. Breathing dried dust or spray mist causes irritation. OSHA exposure limit: Amorphous Silica = 20 mppcf (5 mg/M³) SiO₂ respirable dust or mist. 8-hour time weighted average. Exposure analysis method: NIOSH Manual of Analytical Methods, 3rd edition, Method 7501.

Sensitization:

No sensitizing effect known.

Chronic Effects:

No further relevant information available.

Carcinogenicity

No data indicating any concern for carcinogenicity.

Section 12: Ecological Information

12.1 Aquatic Toxicity, Silicon Dioxide CAS #7631-86-9

Not harmful to aquatic organisms.



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12.2 Persistence and degradability

No further relevant information available.

12.3 Bioaccumulative potential

No further relevant information available.

12.4 Mobility in soil

No further relevant information available.

12.5 Results of PBT and vPvB Assessment

The PBT and vPvB criteria of Annex XIII to the Regulation do not apply to this product.

12.6 Other adverse effects

No further relevant information available.

Section 13: Disposal Considerations

This information presented only applies to the materials as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

Disposal Considerations:

The product should be recycled or burned in an incinerator or scrubber approved for chemical waste.

United States:

The product is not a RCRA hazardous waste.

Section 14: Transport Information

The product is not restricted for transportation.

Sections 14.1 – 14.4

Regulations

U.S. D.O.T.: Not regulated.

ICAO/IATA: Not regulated.

IMO/IMDG: Not regulated.

ADR: Not regulated.

14.5 Environmental Hazards

Not an environmental hazard for transport.

14.6 Special precautions for user

None.

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

Not applicable.

Section 15: Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Worldwide Chemical Inventories

EINECS (EU): All ingredients listed

TSCA (USA): All ingredients listed

DSL (Canada): All ingredients listed

AICS (Australia): All ingredients listed

ENCS (Japan): All ingredients listed

ECL (Korea): All ingredients listed

PICCS (Philippines): All ingredients listed

IECSC (China): All ingredients listed

Technical Instructions (air): Not determined.



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Water hazard class:	Based on available data, Silicon Dioxide is not classified as dangerous for the environment according regulation (EC) 1272/2008.
State Right-to-Know Laws:	Section 3 of this SDS lists all components of the product.
California Proposition 65:	No ingredients listed.
SARA Section 311 /312 (29 CFR 1910.1200) Hazards:	No ingredients listed.
SARA 313, 304 and CERCLA 102 (A):	21 CFR 175.105 – Silicon Dioxide may be used as a component of adhesives used to prepare articles intended for the use in packaging, transporting or holding food.
FDA:	21 CFR 177.1200 – Silicon Dioxide may be used as a component of a polymer used as a base sheet or as a coating applied to a base sheet for use in food packaging. 21 CFR 182.90 – Silicon Dioxide is generally recognized as safe (GRAS) as a substance migrating to food from paper and paper board products used in food packaging.
WHMIS:	Not controlled.
Controlled Products Regulations:	This SDS contains all the information items specified in Schedule 1, Column 3 of the Controlled Products Regulations in a 16-heading format.

15. 2 Chemical safety assessment

A chemical safety assessment has not been carried out for silicon dioxide.

Section 16: Other Information

List of hazard phrases: None, product is not classified.

National Fire Protection Association (U.S.A.) 704 Hazard Health-1, Flammability-0, Reactivity-0, Special-None
HMIS® Hazard Rating: Health-1, Flammability-0, Reactivity-0, Protective Equipment – B; safety glasses, gloves.

Recommended Use: The product is recommended for use in concrete hardening and concrete polishing. Other uses have not been investigated and may have other hazards. For industrial use only, not for food, drug or home use.

Work Alert: Workers using the product should read and understand this SDS and be trained in the proper use of this material.

Other Special Considerations: None known.

SDS Prepared By: Andrew A. Guzelian

Revision Date: May 17, 2018

Supersedes: June 20, 2017

This SDS has been prepared with data from our laboratories, raw material suppliers, and government publications. Information herein is accurate to the best of our knowledge. Suggestions are made without warranty or guarantee of results. Before using, the user should determine the suitability of the products for the intended use, and the user assumes the risk and liability in connection therewith. We do not suggest violation of any existing patents or give permission to practice any patented invention without license.