



SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: SILOXA-TEK 8500 Ultra Concentrate

PRODUCT CODES: 8500UC

MANUFACTURER: KRETETEK INDUSTRIES

STREET ADDRESS: 66 RIVER ROAD

CITY, STATE, ZIP: HUDSON, NH 03051

INFORMATION PHONE: 855-573-8383

EMERGENCY PHONE: Chemtrec 800-424-9300

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SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

Classification GHS

Signal Word: Warning

Chronic aquatic toxicity: Category 3

Acute aquatic toxicity: Category 2

Pictograms:



H-Code Hazard Statements

H401: Toxic to aquatic life

H412: Harmful to aquatic life with long lasting effects

P-Code Precautionary Statements

P273: Avoid release to the environment

P501: Dispose of contents/container to waste disposal.

Other hazards: The product hydrolyses under formation of ethanol (CAS-Nr. 64-17-5). Ethanol is classified concerning both physical and health hazards. The hydrolysis rate and consequently the relevance for the hazard profile of the product is strongly dependent on the specific conditions.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENT</u>	<u>CAS NO.</u>	<u>%</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>OSHA STEL</u>
3-Aminopropyltriethoxysilane	919-30-2	.5	none	none	none
Octyltriethoxy silane	35435-21-3	40-50			
N,N,N-Trimethyl-1-hexadecanaminium chloride	112-02-07	.5			
Ethanol	64-17-5	.5			
Water	7732-18-5	48.5-58.5			

SECTION 4: FIRST AID MEASURES

General information: Get medical attention if irritation occurs or if breathing becomes difficult.

After inhalation: If inhaled remove to fresh air.

After contact with the skin: For skin contact, immediately wipe away excess material. Wash with soap and water.

After contact with the eyes: If contact with eyes, immediately hold eyelids apart and flush with plenty of water for at least 15 min.

After swallowing: If swallowed, rinse mouth with water. Induce drinking plenty of water in small portions.

Advice for the physician: Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

Flammable properties:

Property: Flash point Value: not determinable (Substance exhibits no flashpoint until (ISO 3679) boiling commences.)

Sustained combustibility: not applicable

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

Lower explosion limit (LEL): no data available

Upper explosion limit (UEL): no data available

Ignition temperature: 395°C (743°F)

NFPA Hazard Class (comb/flam liquid): IIIB

Fire and explosion hazards: This material does not present any unusual fire or explosion hazards.

Recommended extinguishing media: Use extinguishing measure appropriate to the source of fire, water-mist, carbon dioxide, dry chemical or foam-type extinguishing media.

Unsuitable extinguishing media: Sharp water jet

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases: Hazardous combustion product: silicon dioxide, formaldehyde, carbon dioxide, carbon monoxide and incompletely burnt hydrocarbons.

Fire fighting procedures: Fire fighters should wear full protective clothing including a self-contained breathing apparatus. Cool endangered containers with water.

SECTION 6: RELEASE MEASURES

Precautions: Secure the area. Wear personal protection equipment (see section 8). Keep unprotected persons away. Avoid contact with eyes and skin. Do not inhale gases/vapours/aerosols. If material is released indicate risk of slipping. Do not walk through spilled material.

HAZWOPER PPE Level: D

Containment: Prevent material from entering surface waters, drains or sewers and soil. Close leak if possible without risk. Contain any fluid that runs out using suitable material (e.g. earth). Retain contaminated water/extinguishing water. Dispose of in prescribed marked containers. Inform authorities if substance leaks into surface waters, sewerage or ground. Spills of material which could reach surface waters must be reported to the United States Coast Guard National Response

Center's toll free phone number (800) 424-8802.

Methods for cleaning up: Take up mechanically and dispose of according to local/state/federal regulations. Do not flush away with water. For small amounts: Absorb with a neutral (non-acidic / non-basic) liquid binding material such as diatomaceous earth and dispose of according to government regulations. For large amounts: Liquids may be recovered using suction devices or pumps. If flammable, only air driven or properly rated electrical equipment should be used. Clean any slippery coating that remains using a detergent / soap solution or another biodegradable cleaner. Silicone fluids are slippery; spills are a safety hazard. Apply sand or other inert granular material to improve traction

Further information: Exhaust vapours. Eliminate all sources of ignition. Consider explosion protection. Observe notes under section 7.

SECTION 7: HANDLING AND STORAGE

General information: Always stir well before use.

Handling:

Precautions for safe handling: Ensure adequate ventilation. Must be syphoned off in situ. Avoid formation of aerosols. In case of aerosol formation special protective measures are required (exhausting by suction, respiratory protection). Spilled substance increases risk of slipping. Keep away from incompatible substances in accordance with section 10. Observe information in section 8

Precautions against fire and explosion: Product may release ethanol.

Flammable vapors may accumulate and form explosive mixtures with air in containers, process vessels, including partial, empty and uncleaned containers and vessels, or other enclosed spaces. Keep away from sources of ignition and do not smoke. Take precautionary measures against electrostatic charging. Cool endangered containers with water.

Storage

Conditions for storage rooms and vessels: Observe local/state/federal regulation

Advice for storage of incompatible materials: Observe local/state/federal regulation

Further information for storage:

Store in a dry and cool place. Protect against sun. Protect against frost. Store container in a well ventilated place.

Minimum temperature allowed during storage and transportation: 0 ° C (32 ° F)

Do not allow this material to freeze.

Maximum temperature allowed during storage and transportation: 40 ° C (104 ° F)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls

Ventilation:

Use with adequate ventilation.

Local exhaust:

If spraying or other aerosol generating operations are performed, local exhaust ventilation designed to capture mists and sprays, such as a paint spray booth, is recommended.

Associate substances with specific control parameters such as limit values : Maximum airborne concentrations at the workplace: CAS: 64-17-5, Ethanol OSHA PEL 1,00 mg/m³, 1000 ppm. Re Ethanol: STEL is 1000 ppm; carcinogenicity: A3 (ACGIH)

Personal protection equipment (PPE) Respiratory protection:

Respiratory protection is not normally required.

Hand protection:

Any liquid-tight rubber or vinyl gloves.

Eye protection:

Safety glasses with side shields.

Other protective clothing or equipment: Additional protective clothing or equipment is not normally required. Provide eye bath and safety shower.

General hygiene and protection measures: Follow standard industrial hygiene practices when using this material.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state / form: fluid - emulsion

Colour: white

Odour: faint

Safety parameters

Melting point/melting range: Boiling -1 ° C (30 ° F)

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

Flash point Value: > 100° C (212 ° F)

Sustained combustibility: not applicable

Ignition temperature: 395 ° C (743 ° F)

Lower explosion limit (LEL): no data available

Upper explosion limit (UEL): no data available

Vapour pressure: 23 hPa at 20 ° C (68 ° F)

Density: 0.95 g/cm

Water solubility / miscibility: completely miscible

pH-Value: approx. 8

Viscosity(kinematic): approx. 12 mPa.s at 25 ° C (77 ° F)

Further information: Explosion limits: explosion limits for release ethanol: 3.5-15%(V).

Odour limit: No data available.

SECTION 10: STABILITY AND REACTIVITY

General information: If stored and handled in accordance with standard industrial practices no hazardous reactions are known.
Conditions to avoid: Heat, open flames, and other sources of ignition.
Materials to avoid: Reacts with: basic substances and acids . Reaction causes the formation of: ethanol
Hazardous decomposition products: By hydrolysis: ethanol . The following applies for the silicone content of the substance:
Measurements have shown the formation of small amounts of formaldehyde at temperatures above about 150 ° C (302 ° F) through oxidation.
Further information: Hazardous polymerization cannot occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity: Assessment: For similar products no indications for a specific hazard due to aerosol inhalation were identified in animal tests. However, inhalation of respirable aerosol should be avoided.
Product details: Oral exposure: LD50:>2000mg/kg This assessment is made under consideration of relevant data on ingredients.
Species: rat, Source: conclusion by analogy. Acute toxicity estimate (ATE): ATE mix (oral): > 2000 mg/kg

Skin corrosion/irritation Assessment: For this endpoint no toxicological test data is available for the whole product.
Serious eye damage / eye irritation Assessment: For this endpoint no toxicological test data is available for the whole product.
Respiratory or skin sensitization Assessment: For this endpoint no toxicological test data is available for the whole product.
Germ cell mutagenicity Assessment: For this endpoint no toxicological test data is available for the whole product.
Carcinogenicity Assessment: For this endpoint no toxicological test data is available for the whole product.
Reproductive toxicity Assessment: For this endpoint no toxicological test data is available for the whole product.
Specific target organ toxicity (single exposure) Assessment: For this endpoint no toxicological test data is available for the whole product.
Aspiration hazard Assessment: For this endpoint no toxicological test data is available for the whole product.
Further toxicological information: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. Other information: Hydrolysis product / impurity: Ethanol (64-17-5) is readily absorbed at all exposure routes. Ethanol may cause irritation of eyes and mucosa, trigger dysfunction of the central nervous system and cause nausea as well as dizziness. Chronic exposure to high amounts of ethanol may cause damage to liver and central nervous system.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity Assessment: According to current knowledge adverse effects on water purification plants are not expected.
Persistence and degradability Assessment: Contact with water liberates ethanol and silanol- and/or siloxanol-compounds. Silicone content: biologically not degradable. Elimination by adsorption to activated sludge. The hydrolysis product (Ethanol) is readily biologically degradable.
Bioaccumulative potential Assessment: Bioaccumulation is not expected to occur.
Mobility in soil Assessment:
Silicone content: Absorbed by floating particles. Separation by sedimentation.
Other adverse effects: none known

SECTION 13: WASTE DISPOSAL

Product disposal recommendation: Recommendation:
Material that cannot be used, reprocessed or recycled should be disposed of in accordance with Federal, State and local regulations at an approval facility. Depending on the regulations, waste treatment methods may include e.g. landfill or incineration.
Packaging disposal: Recommendation: Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/state/federal regulations. Unclean packaging should be treated with the same precautions as the material.

SECTION 14: TRANSPORTATION

DOT: Valuation: Not regulated for transport
Other information: Protect from freezing, when exposed to cold temperatures approaching 0 ° C (32 ° F) or below.
IMDG: Not regulated for transport
ICAO-TI/IATA-DGR: Not regulated for transport

SECTION 15: REGULATORY INFORMATION

U.S. Federal regulations

TSCA inventory status and TSCA information:

This material or its components are listed on or are in compliance with the requirements of the TSCA Chemical Substance Inventory.

TSCA 12(b) Export Notification:

This material does not contain any TSCA 12(b) regulated chemicals.

CERCLA Regulated Chemicals:

This material does not contain any CERCLA regulated chemicals.

SARA 302 EHS Chemicals:

This material does not contain any SARA extremely hazardous substances.

SARA 311/312 Hazard Class:

This product does not present any SARA 311/312 hazards.

SARA 313 Chemicals:

This material does not contain any SARA 313 chemicals above de minimus levels.

HAPS (Hazardous Air Pollutants: CAS-No 67056-1 Methanol, upper limit wt. %: <=0.0029

U.S. State regulations

California Proposition 65 Carcinogens:

This material does not contain any chemicals known to the state of California to cause cancer.

California Proposition 65 Reproductive Toxins:

67-56-1 Methanol

Massachusetts Substance List:

This material contains no listed components.

New Jersey Right-to-Know Hazardous Substance List:

This material contains no listed components.

Pennsylvania Right-to-Know Hazardous Substance List:

This material contains no listed components.

Details of international registration status: Relevant information about individual substance inventories, where available, is given below.

South Korea(Republic of Korea).....:ECL(Existing Chemicals List):This product is listed in, or complies with, the substance inventory.

Japan.....:ENCS(Handbook of Existing and New Chemical Substances):This product is listed in, or complies with, the substance inventory.

Australia.....:AICS(Australian Inventory of Chemical Substances):This product is listed in, or complies with, the substance inventory.

People's Republic of China.....:IECSC(Inventory of Existing Chemical Substances in China):This product is listed in, or complies with, the substance inventory.

Canada.....:DSL(Domestic Substance List):This product is listed in, or complies with, the substance inventory.

Philippines.....:PICCS(Philippine Inventory of Chemicals and Chemical Substances):This product is listed in, or complies with, the substance inventory. United States of America(USA).....:TSCA(

Toxic Substance Control Act Chemical Substance Inventory):This product is listed in, or complies with, the substance inventory.

Taiwan (Republic of China).....:TCSI(Taiwan Chemical Substance Inventory):This product is listed in, or complies with, the substance inventory. General note: The Taiwanese chemicals regulation requires a phase 1 registration for TCSI-listed or TCSI-compliant substances if imports to Taiwan or manufacturing in Taiwan exceed the trigger quantity of 100 kg/a (for mixtures to be calculated per each ingredient). It is the duty of the importing/manufacturing legal entity to take care of this obligation.

European Economic Area(EEA).....:REACH(Regulation (EC) No 1907/2006):General note: the registration obligations for substances imported into the EEA or manufactured within the EEA by the supplier mentioned in section 1 are fulfilled by the said supplier. The registration obligations for substances imported into the EEA by customers or other downstream users must be fulfilled by the latter.

SECTION 16: OTHER INFORMATION

Disclaimer: the information contained herein is based on the data available and is believed to be accurate, however, the manufacturer makes no warranty expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. Accordingly, we assume no responsibility for injury from the use of this product.