

SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: SILOXA-TEK 8510

PRODUCT CODES: 8510

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

FAX PHONE: 855-573-8383

DATE REVISED: 6/1/18

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

Classification GHS

Flammable liquid: Category 3 Skin irritation: Category 2

Specific target organ toxicity-single exposure: Category 3

Serious eye damage/eye irritation: Category 2A

Aspiration hazard: Category 1

Hazardous to the aquatic environment: Chronic, Category 4

Pictograms: Flammable, Aspiration, Warning

H-Code Hazard Statements

H226: Flammable liquid and vapour

H304: May be fatal is swallowed and enters airways

H315: Causes skin irritation

H319: Causes serious eye irritation

H336: May cause drowsiness or dizziness.

H413: May cause long lasting harmful effects to aquatic life

P-Code Precautionary Statements

P210: Keep away from heat, hot surface, sparks, open flames and other ignition souces. No smoking.

P233: Keep container tighly closed.

P240: Ground/bond container and receiving equipment

P242: Use only non-sparking tools

P243: Take precautionary measures against static discharge P261: Avoid breathing dust/fume/gas/mist/vapors/spray.

P264: Wash skin thoroughly after handling

P271: Use only outdoors or in a well ventiliated area.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection

P301+P310: If swallowed immediately call a poison center/doctor

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340+P312: IF INHALED: Remove person to fresh air and keep comfortable clothing for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

P331: Do not induce vomiting

 $P305 + P351 + P338: If in eyes: rinse \ cautiously \ with \ water for \ several \ minutes. \ Remove \ contact \ lenses, if \ present \ and \ = easy \ to \ do.$

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

P337+P313: If eye irritation persists: get medical advice/attention

P362: Take off contaminated clothing and wash before reuse.

P370+P378: In case of fire:use extinguishing powder, foam or carbon dioxide to extinguish

P402+P235: Store in a well-ventilated place. Keep cool.

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

P501: Dispose of contents/container to waste disposal.

The following percentage of the mixture consists of ingredients with unknown acute toxicity: 6.3

The following percentage of the mixture consists of ingredients with unknown hazards to the aquatic environment 6.3

Other hazards: Product hydrolyses under formation of methanol (CAS no 67-56-1) Methanol are toxic by inhalation in contact with skin and if swallowed. Methano. causes damage to organs. Methanol is highly flammable. Inhalation of aerosol spray may damage health. Product hydrolyses under formation of ethanol (CAS no 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

INGREDIENTS

Nanoengineered Proprietary Isomers of Silane Proprietary Teflon Polymer Isoalkanes Distilled Hydrocarbon Mixture

SECTION 4: FIRST AID MEASURES

General information: Move out of dangerous area. Get medical attention if irritation or other symptoms occur. Before seeking medical attention remove contaminated clothing and shoes. Take a copy of the Safety Data Sheet when going for medical treatment. Symptoms of poisoning may appear several hours later. Do not leave the victim unattended.

After inhalation: If inhaled move to fresh air. If breathing is difficult give oxygen. If not breathing give artificial respiration. Consult a physician after significant exposure. If unconscious place in recovery position and seek medical advice.

After contact with the skin: If contact with skin, immediately flush skin with plenty of water for at least 15 min. If on clothes, remove clothes. If irritation persists, call a physician.

After contact with the eyes: If contact with eyes, immediately hold eyelids apart and flush with plenty of water for at least 15 min. Remove contact lenses. Protect unharmed eye. If eye irritation persists, consult a physician.

After swallowing: For Ingestion, do not attempt to induce vomiting. Danger of aspiration. If swallowed, rinse mouth with water. Induce drinking plenty of water in small portions. Get medical attention immediately. Indicate the possible formation of: methanol. Show label if possible. Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptons persist, call a physician. Take victim to hospital immediately.

Advice for the physciain: Methanol (CAS 67-56-1) is readily and rapidly absorbed at all exposure routes and is toxic by all routes. Methanol may cause irritation of the mucosa, as well as nausea, vomiting, headaches, vertigo and visual disorders, including blindness (irrevers ible damage to the optic nerve), acidosis, spasms, narcosis and coma. There may be a delay in the onset of these effects after exposure.

SECTION 5: FIRE-FIGHTING MEASURES

Flammable properties:

Property: Flash point Value: not determined

Property: Boiling point/boiling range Value: not determined Property: Lower explosion limit (LEL) Value: not determined Property: Upper explosion limit (UEL) Value: not determined

Ignition temperature Value: not determined

NFPA Hazard Class (comb/flamm liquid): II

Fire and Exlosion Hazards: OSHA combustible, DOT flammable liquid and vapor. Vapors are heavier than air and may travel along the ground, be moved by ventilation systems, settle in pits or low areas, and be ignited by ignition sources distant from the handling point. The material is lighter than water, burning spilled material will float on top of any water released from hose or sprinkler systems spreading the fire beyond the initial fire response area. Never use welding or cutting torch on or near any container of this material, even if empty, because an explosion could occur. As a result of hydrolysis flammable vapors may accumulate in the container head space. Material may form toxic and corrosive gases in case of fire. Do no allow run-off from fire fighting to enter drains or water courses. Recommended extinguishing media: AFFF alcohol compatible foam. Carbon dioxide. Dry chemical.

Unsuitable extinguishing media: High volume water jet, water, halones

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases: Hazardous decomposition products: carbon dioxide, carbon monoxide, formaldehyde, silicon dioxide and incompletely burnt hydrocarbons. Carbon oxides, sulfur oxide, hydrogen sulfide, sulphuric acid.

Fire fighting procedures: Full turn-out gear and Self Contained Breathing Apparatus (SCBA) should be worn when fighting large fires. Use personal protective equipment.

Furthur information: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinghusing water must be disposed of in accordance with local regulations. For safety reasons in cse of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers.

SECTION 6: RELEASE MEASURES

Precautions: Wear personal protection equipment (see section 8). Avoid contact with eyes and skin. Avoid inhaling mists and vapours. HAZWOPER PPE Level: D Ensure adequate ventiliation, Remove all sources of ignition, Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. If material is released indicate risk of slipping.

Containment: Prevent material from entering sewers or surface waters. 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: Contain spillage, and then collect with non-combustible absorbent material and place in container for disposal according to local/state/federal regulations. Do not flush away with water. Take up mechanically and dispose of according to local/state/federal regulations. larger amounts and pump up into suitable containers. If flammable, only air driven or properly rated electrical equipment should be used. Silicone fluids are slippery, spills are a safety hazard.

Furthur information: Exhaust vapors. Eliminate all sources of ignition. Consider explosion protection.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling: Ensure adequate ventilation. Must be syphoned off in situ. Spilled substance increases risk of slipping. Avoid formation of aerosol. Do not breahe vapors/dust. Avoid exposure – obtain special instructions before use. Avoid contact with skin and eyes. Smoking, eating, drinking should be prohibited in the application area. Take precaustionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations.

Precautions against fire and explosion required: Take precautionary measures against electrostatic charging. Cool endangered containers with water. 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 open flames, heat and sparks. Keep away from sources of ignition and do not smoke. Do not spray on a nake flame or any incandescent materials. Product may release ethanol.

Storage

Conditions for storage rooms and vessels: Make sure there is no possibility of entering the ground.

 $\label{prop:local_state_federal} Advice for storage of incompatible materials: Observe local/state/federal regulations.$

Further information for storage:

No smoking. Do not store in open air. Store in a dry and cool place. Keep container tightly closed in a dry and well-ventilated place. Protect against moisture. Containers which are opened must be carefully reseal and kept unright to precent leakage. Observe label precautions. Electrical installations/working materials must comply with the technological safety standards. Minimum temperature allowed during storage and transportation: $10 \,^{\circ}$ C ($50 \,^{\circ}$ F)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

CAS#: 64741-65-7 Naphtha (petroleum), heavy alkylate, Value type: TWA, Control parameters: 500 ppm, 2000 mg.m3 Basis: OSHA Z-1 CAS#: 64741-65-7 Naphtha (petroleum), heavy alkylate, Value type: TWA, Control parameters: 400 ppm, 1600 mg.m3 Basis: OSHA P0

CAS#: 64-17-5 Ethanol, 1000 ppm, 1000 mg.m3, OSHA PEL

Engineering controls

Ventilation:

Use with adequate ventilation.

Local exhaust:

To control flammable/combustible vapors: Local exhaust ventilation which meets the requirements of ANSI Z9.2 is recommended to control airborne contaminants at the point of use. (to maintain concentration below TLV).

Personal protection equipment (PPE): Respiratory protection is not normally required and only necessary if long term or high level exposures are likely to occur. A NIOSH approved air purifying respirator equipped with universal multi-contaminant multi-gas/vapor cartridges is recommended if over exposure to chemical vapors could occur.

Hand protection:

Butyl rubber protective gloves or neoprene or nitrile rubber gloves .

Eye protection:

Safety glasses with side shields or chemical safety goggles. Where there is risk of splashing: tight fitting chemical safety goggles. Eye was bottle with pure water. Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection Impervious clothing, choose body protection according to the amount and concentration of the dangerous substance at the work place.

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: Avoid contact with eyes, skin and clothing. Avoid breathing dust/vapor/mist/gas/aerosol. When handling do not eat, drink, smoke or apply cosmetics. Wash thoroughly after handling.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Physical state / form: liquid
Colour: clear to yellowish
Odour: hydrocarbon-like

Safety parameters

Boiling point / boiling range Value: not determined

Flash point Value: not determined Ignition temperature: not determined Lower explosion limit (LEL): not determined Upper explosion limit (UEL): not determined

Vapour pressure: not determined

Density: not determined

Water solubility / miscibility: not determined

pH-Value: not applicable

Furthur information: Expolsion limits for release ethanol: 3.5-15% (V)

SECTION 10: STABILITY AND REACTIVITY

General information: If stored and handled in accordance with standard industrial practices no hazardous reactions are known. Chemical stability stable under normal conditions

Possibility of hazardous rections: Vapors may form explosive mixture with air.

Conditions to avoid: moisture, heat, open flames, and other sources of ignition.

Materials to avoid: Reacts slowly with: water, basic substances and acids. Reaction causes the formation of: methanol, ethanol. Incompatible materials: strong oxidizing agents, strong reducing agents

Hazardous decomposition products: Carbon oxides, Sulphur oxides. 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. By hydrolysis: methanol, ethanol.

Further information: Hazardous polymerization cannot occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity Assessment: For this endpoint no toxicological test data is available for the whole product.

Skin corrosion/irritation Assessment: Species: rabbit, result: irriating to skin

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.

IARC: Group 2B: Possibly carcinogenic to humans

OSHA: 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.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by NTP.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

Reproductive toxicity Assessment: For this endpoint no toxicological test data is available for the whole product.

Specific target organ toxicity (single exposure) Assessment: Exposure routes: inhalation, target organs, central nervous system, assessment: may cause drowsiness or dizziness. The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

Aspiration hazard Assessment: May be fatal if swallowed and enters airways.

Further toxicological information: symptoms of overexposure may be headache, dizziness, tiredness, nausea, and vomiting.

Concentrations substantially above the TLV value may cause narcotic effects. Solvents may degrease the skin.

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

Assessment: Acute aquatic toxicity assessment Toxic to aquatic life, chronic aqautic toxicity assessment: toxic to aquatic life with long lasting effects.

Persistance and degradability: Contact with water liberates ethanol and silanol-and/or siloxanol-compounds. The hydrolysis product (Ethanol) is readily biologically degradable.

Bioaccumulative potential Assessment: Partition coefficient: n-octanol/water: log Pow: 3.3-5.3

Mobility in soil Assessment: No data known

Other adverse effects:

Ozone-depletion potential: Regulation: 40 CFR Protection of Environment, Part 82 Protection of Stratospheric Ozone – CAA Section 602 Class I Substances. This product contains neither contains or was manufactuered with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40CFR 82, Subpt A, App A +B)

Additional ecological information: An environment hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.

SECTION 13: WASTE DISPOSAL

RCRA Waste Classification: 001 (Ignitable): This classification applies only to the material as it was originally produced. Product disposal recommendation: Recommendation: Dispose of according to regulations by incineration in a special waste incinerator. Observe local/state/federal regulations.

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. Do not burn ir use a cutting torch on the empty container.

SECTION 14: TRANSPORTATION

| DOT: | |
|----------------------------------|--|
| Valuation: Proper Shipping Name: | Dangerous Goods Petroleium distillates n.o.s. |
| Technical name: | |
| UN no: Packaging Group | 1268 |
| Label: | **TL:flammable liquid/3 |

Protect from freezing, when exposed to cold temperatures approaching 0 $^{\circ}\,$ C (32 $^{\circ}\,$ F) or

oelow.

Special notes: The flash point for this material is greater than 100F. Therefore in accordance with 49 CFR 173.150 non-bulk containers <450L or <119 gallons of this material may be shipped as non-regulated when transported solely by land, as long as the material is not a hazardous waste, a marine pollutant or specifically listed as a hazardous substance.

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 304 Extremely Hazardous Substances Reportable Quantity:

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazard Class:

Fire hazard. Immediate (acute) health hazard.

SARA 313 Chemicals:

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

Clean Air Act: This product does not contain any hazardous air pollutants (HAP) as defined by the U.S. Clean Air Act Section 12 (40 CFR 61). This product does not contain any chemicals listed under the US Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F). This product does not contain any chemicals listed under the US Clean Air Act Section 111 SOCMI Intermedite or Final VOC's (40 CFR 60.489).

Clean Water Act: This product does not contain any Hazardous Substances listed under the US Clean Water Act, Section 311, Table 116.4A. This product does not contain any Hazardous Chemicals listed under the US Clean Water Act, Section 311, Table 117.3 This product does not contain any toxic pollutants listed under the US Clean Water Act, Section 307.

U.S. State regulations

California Proposition 65 Carcinogens:

71-43-2 Benzene

California Proposition 65 Reproductive Toxins:

67-56-1 Methanol 71-43-2 Benzene

Massachusetts Substance List:

34590-94-8 Dipropyleneglycol monomethylether

64-17-5 Ethanol

New Jersey Right-to-Know Hazardous Substance List: 34590-94-8 Dipropyleneglycol monomethylether 64741-65-7 Naphtha (petroleum), heavy alkylate

64-17-5 Ethanol

Pennsylvania Right-to-Know Hazardous Substance List: 34590-94-8 Dipropyleneglycol monomethylether 64741-65-7 Naphtha (petroleum), heavy alkylate

64-17-5 Ethanol

Canadian regulations

This product has been classified in accordance with the Hazard criteria of the CPR and the SDS contains all the information required by the CPR.

WHMIS Hazard Classes: D2B, B3

DSL Status: This material or its components are listed on the Canadian Domestic Substances List.

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.