



SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ISO-TEK 8501

PRODUCT CODES: 8501

MANUFACTURER: KRETETEK INDUSTRIES

STREET ADDRESS: 66 RIVER RD

CITY, STATE, ZIP: HUDSON NH 03051

INFORMATION PHONE: 855-573-8383

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FAX PHONE: 855-573-8383

DATE REVISED: 10/1/17

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture:

Classification GHS

Flammable liquid: Category 4

H-Code Hazard Statements:

H227: Combustible Liquid

P-Code Precautionary Statements:

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

P280: Wear protective gloves/protective clothing/eye protection.

P370+P378: In case of fire: Use extinguishing powder, alcohol-resistant foam or carbon dioxide to extinguish.

P403+P235: Store in a well-ventilated place. Keep cool.

P501: Dispose of contents/container to waste disposal.

Other hazards: Inhalation of aerosol spray may damage health. Product hydrolyses, producing ethanol (CAS no. 64-17-5).

Ethanol is highly flammable.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS

35435-21-3 Nano Isomers of Octyl triethoxy silane

This material does not contain any reportable hazardous ingredients.

Substances listed in the Subsections "HAPS" and "California Proposition 65 Carcinogens / Reproductive Toxins" that are not listed in this section are only present at quantities below 0.1% for California Proposition 65 listed toxins or below 1% for non-carcinogenic HAPS or they are inextricably bound in the product.

SECTION 4: FIRST AID MEASURES

General information: 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.

After inhalation: If inhaled as aerosol, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.

After contact with the skin: If contact with skin, immediately flush skin with plenty of water or with water and soap.

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: Drink plenty of water. Get medical attention immediately. Show label. Indicate the possible formation of: ethanol

SECTION 5: FIRE-FIGHTING MEASURES

Flammable properties:

Property: Flash point Value: 64 ° C (147 ° F) Method: ISO 3679

Sustained combustibility: : >95 ° C (203 ° F)

Property: Boiling point/boiling range Value > 100 ° C (> 212° F) at 1013 hPa

Property: Lower explosion limit (LEL) Value: not determined

Property: Upper explosion limit (UEL) value: not determined

Ignition temperature value: 265 ° C (509 ° F)

NFPA Hazard Class (comb/flamm liquid): IIIA

Fire and Explosion Hazards: Caution! OSHA Combustible liquid and vapor. This material will flash but does not sustain combustion. Ignitable vapors may be released during processing or curing. Explosion limits for hydrolysis product: 3.5-15% v/v (ethanol)

Recommended extinguishing media: Sand , carbon dioxide , dry chemical or alcohol-resistant foam .

Unsuitable extinguishing media: Water

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases: Hazardous decomposition products: carbon dioxide , carbon monoxide , formaldehyde , silicon dioxide , nitrogen oxides 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: Avoid inhaling mists and vapours. Avoid contact with eyes and skin.

HAZWOPER PPE Level: D

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. 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: Do not flush away with water. Take up mechanically and dispose of according to local/state/federal regulations.

Further information: Eliminate all sources of ignition

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling: In case of aerosol formation special protective measures are required (exhausting by suction, respiratory protection). Spilled substance increases risk of slipping.

Precautions against fire and explosion required: Keep away from open flames, heat and sparks. Keep away from sources of ignition and do not smoke. Take precautionary measures against electrostatic charging. Cool endangered containers with water. Product can separate methanol. 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. In partly emptied containers formation of explosive mixtures is possible

Storage: Conditions for storage rooms and vessels: Protect against frost.
Advice for storage of incompatible materials: none known
Further information for storage: Keep container tightly closed and store in a cool, well ventilated place.
Minimum temperature allowed during storage and transportation: ° C (32 ° F)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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. 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 substance with specific control parameters such as limit values.

Maximum airborne concentrations at the workplace: 64-17-5 Ethanol Re: Ethanol (CAS no. 64-17-5): STEL is 1000 ppm; carcinogenicity: A3 (ACGIH)

Personal protection equipment (PPE):

Respiratory protection: If spraying or other operations which generate an aerosol mist are conducted, respiratory protection for exposed personnel is recommended. A NIOSH approved air purifying respirator equipped with universal multi-contaminant, multi-gas/vapor cartridges and at least P-99 solid/aerosol particulate filters is recommended if overexposure to dusts, mists, or vapors could occur.

Hand protection: Butyl rubber protective gloves

Eye protection: Recommendation: Safety glasses with side shields or chemical safety goggles.

Other protective clothing or equipment: Recommendation: Any standard or disposable coveralls. Provide eye bath and safety shower.

General hygiene and protection measures: Avoid contact with eyes and skin. Do not breathe dust/vapor/mist/gas/aerosol. Do not eat, drink or smoke when handling. Wash thoroughly after handling.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Physical state / form: gel

Color: white to yellowish

Odor: slight

Safety parameters:

Melting point/melting range value: not determined

Boiling point / boiling range value: 100 ° C (212 ° F) at 1013 hPa

Flash point value: 64° C (147 ° F)

Sustained combustibility: 95° C (203 ° F)

Ignition temperature: 265 ° C (509 ° F)

Lower explosion limit (LEL): not determined

Upper explosion limit (UEL): not determined

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

Density: 0.9 g/cm³

Water solubility / miscibility: completely miscible at 20 ° C (68 ° F)

pH-Value: not applicable

Viscosity(dynamic): not applicable

Re 9.2 solubility in water: Hydrolytic decomposition occurs. Explosion limits for released 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.
Conditions to avoid: none known

Materials to avoid: Reacts slowly with: water and acids . Reacts with: acids and alkalis . Reaction causes the formation of: ethanol

Hazardous decomposition products: By hydrolysis: ethanol.

Further information: Hazardous polymerization cannot occur.

Conditions to avoid hazardous polymerization: none known

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity assessment: No mortality with the given dose.

Skin corrosion/irritation assessment: Not irritating. The assessment is made under consideration of relevant data on ingredients.

Serious eye damage/eye irritation assessment: Based on the available data a clinically relevant eye irritation hazard is not expected.

Respiratory or skin sensitization: Not sensitizing, the assessment is made under consideration of relevant data on ingredients.

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 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 known or anticipated carcinogen by 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 OSHA. Other information: Hydrolysis product / impurity: According to literature, ethanol (67-17-5) irritates the mucous membranes, slightly irritates the skin, degreases the skin, is narcotic and may cause liver damage.

SECTION 12: ECOLOGICAL INFORMATION

Assessment: For the product as a whole, no test data is available. According to current knowledge adverse effects on water purification plants are not expected.

Persistence and degradability: Contact with water liberates ethanol and silanol- and/or siloxanol-compounds. The hydrolysis product (Ethanol) is readily biologically degradable. Silanol- and/or siloxanol-compounds: Biologically not degradable.

Bioaccumulative potential assessment: no data known

SECTION 13: WASTE DISPOSAL

Product disposal recommendation: 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. Uncleaned 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. This material has been tested and does not sustain combustion.

Transport by sea IMDG-code: Not regulated for transport

Transport by air IMDG-code: 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: Fire hazard.

SARA 313 Chemicals: This material does not contain any SARA 313 chemicals above the minimum levels.

HAPS: Methanol Upper Limit: 0.0072%

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: 64-17-5: This material contains no listed components.

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: 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.