

1. Identification

Product identifier: Iso-Tek™ 8555 CMU

Recommended restrictions

Recommended use: For industrial use

Restrictions on use: Not determined.

Manufacturer/Importer/Distributor Information

Company Name : KreteTek Industries, Inc.
66 River Road
Hudson, NH 03051
USA

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2. Hazard(s) identification

Hazard Classification

Physical Hazards

Flammable liquids Category 4

Health Hazards

Skin Corrosion/Irritation Category 2

Environmental Hazards

Acute hazards to the aquatic environment Category 3

Label Elements

Hazard Symbol:



Signal Word: Warning

Hazard Statement:
Flammable liquid and vapor.
Causes skin irritation.
Harmful to aquatic life.

Precautionary Statements

Prevention: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical, ventilating and lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Wash face, hands and any exposed skin thoroughly after handling. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Response: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. If skin irritation occurs: Get medical advice/attention. Specific treatment (see supplemental first aid instructions on this label). In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Storage: Store in a well-ventilated place. Keep cool.

Disposal: Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

Hazard(s) not otherwise classified (HNOC): None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%) [*]
Alkyltriethoxysilane			20 - 40%
Isobutyltriethoxysilane			20 - 40%
Polysiloxane, containing propyl- and ethoxy groups			20 - 40%

^{*} All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Trade secret information: A specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Description of necessary first-aid measures

General information:	Remove contaminated or soaked clothing immediately and dispose of safely.
Inhalation:	If aerosol or mists are inhaled, take affected persons out into the fresh air. Possible discomforts include severe irritation of mucus lining (nose, throat, eyes), cough, sneezing and flow of tears. In case of persistent discomfort, obtain medical attention immediately.
Skin Contact:	Wash skin immediately with plenty of water for at least 15 minutes, while removing contaminated clothing and footwear. Seek medical assistance. Wash clothes before wearing them again. Destroy contaminated shoes or clean them thoroughly before wearing them again
Eye contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Do not allow contaminated water to contact the unaffected eye or face during irrigation of an affected eye. Consult an eye doctor (ophthalmologist).
Ingestion:	If accidentally swallowed, rinse mouth thoroughly with water and afterwards, drink plenty of water. In case of discomfort, obtain medical attention. Never give by mouth to anyone, who faints quickly, becomes unconscious or has cramps.
Personal Protection for First-aid Responders:	No data available.

Most important symptoms/effects, acute and delayed

Symptoms:	After absorbing large amount of substance, apply therapy for irritative effects. If substance has been swallowed, early endoscopy is recommended in order to assess mucosa lesions in the esophagus and stomach which may appear. If necessary, suck away leftover substance. Allergic reactions cannot be excluded. Apply treatment of allergic reaction if necessary.
Hazards:	None known.

Indication of immediate medical attention and special treatment needed

Treatment:	If required, therapy of irritative effect. If substance has been swallowed: Early endoscopy in order to assess mucosa lesions in the oesophagus and stomach which may appear. If necessary, aspirate leftover substance.
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5. Fire-fighting measures

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:	Water spray, fog, CO2, dry chemical, or alcohol resistant foam.
Unsuitable extinguishing media:	High volume water jet.

Specific hazards arising from the chemical:	Combustible liquid. Vapors can travel to a source of ignition and flash back. Explosive mixtures may occur at temperatures at or above the flashpoint.
Special fire fighting procedures:	Water used to extinguish fire should not enter drainage systems, soil or stretches of water. Ensure there are sufficient retaining facilities for water used to extinguish fire. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Special protective equipment for fire-fighters:	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:	Use personal protective equipment. Ensure adequate ventilation.
Methods and material for containment and cleaning up:	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Fill into marked, sealable containers. To be disposed of in compliance with existing regulations.
Environmental Precautions:	Do not allow entrance in sewage water, soil stretches of water, groundwater, drainage systems. Obey relevant local, state, provincial and federal laws and regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation):	Provide adequate ventilation.
Safe handling advice:	Use in the open air or with adequate ventilation. Avoid contact with skin and eyes. Handle in accordance with good industrial hygiene and safety practice. If workplace exposure limits are exceeded and/or larger amounts are released (leakage, spilling, dust) the indicated respiratory protection should be used. If there is the possibility of skin/eye contact, the indicated hand/eye/body protection should be used. Do not breathe in vapours or aerosols.
Contact avoidance measures:	No data available.
Safe storage conditions:	The product has an intermediate conductivity (static conductivity 100-10,000 pS/m) Liquids with a low conductivity (static conductivity < 100 pS/m) or intermediate conductivities (static conductivity 100 pS/m - 10,000 pS/m) might become electrostatically charged and thus present potential sources ignition. Germany: Technical Rules for Hazardous Substances - Prevention of the Risk of Ignition as a Result of Electrostatic Charges EU: NFPA 77, Recommended Practice on Static Electricity Take precautionary measures against static charges, keep away from sources of ignition. This material may have a low electrical conductivity and therefore may accumulate dangerous levels of static electricity. An ignitable vapor-air mixture can form inside storage tanks.

The user must be sure to dissipate static charge by careful bonding and grounding of all equipment and personnel involved in fluid transfer with continuity checks to prove effectiveness. Additional precautions against fire and explosion are the use of inert gas to purge vapor space; dip-pipes while filling vessels, especially lined vessels; grounded tank level floats; reduced flow velocity; self-closing valves on transfer lines and flame arrestors in vent lines.

Additional guidance on fire and explosion protection may be found in various consensus standards, including NFPA 30, 69 and 77 and API 2003 as well as OSHA regulation 29CFR1910.106.

Follow all SDS/label precautions even after container is emptied because it may retain product residues. Keep containers tightly closed in a cool, well-ventilated place. Protect from moisture. Residual vapors might explode on ignition; do not apply heat, cut, drill, grind or weld on or near this container.

Safe packaging materials: No data available.

Storage Temperature: No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Hazardous components without workplace control parameters

Chemical Identity	Type	Exposure Limit Values	Source
Ethanol (Ethyl alcohol)	STEL	1,000 ppm	US. ACGIH Threshold Limit Values, as amended (03 2016)
	REL	1,000 ppm 1,900 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
	PEL	1,000 ppm 1,900 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (03 2016)

Please refer to the latest edition of the appropriate source text and consult an industrial hygienist or similar professional, or local agencies, for further information.

None of the components have assigned exposure limits.

Biological Limit Values

No biological exposure limits noted for the ingredient(s).

Appropriate Engineering Controls Provide adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/face protection: Safety glasses

Skin Protection

Hand Protection: Material: Polychloroprene (PCP)
Break-through time: >= 480 min
Material: Nitrile rubber/Nitrile latex (NBR)
Break-through time: >= 480 min
Material: Fluorinated rubber (Viton)
Break-through time: >= 480 min
Guideline: Source: GESTIS substance database (hazardous substance

information system of commercial professional associations)Additional Information: Selection of protective gloves to meet the requirements of specific workplaces., Suitability for specific workplaces should be clarified with protective glove manufacturers., The information is based on our own tests, references from the literature and information from glove manufacturers, or derived by analogy with similar materials., Be aware that in daily use the durability of a chemical resistant protective glove can be notably shorter than the break through time measured according to EN 374, due to the numerous outside influences (e.g. temperature).Additional Information: 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.

Skin and Body Protection: suitable protective clothing - Use disposable clothing if appropriate. A safety shower and eye wash fountain must 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.

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.

Hygiene measures: When using, do not eat, drink or smoke. Wash face and/or hands before break and end of work. Immediately remove contaminated clothing. Wash contaminated clothing before reuse.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	colorless to yellowish
Odor:	almost odorless, slightly alcoholic
Odor Threshold:	No data available.
Freezing point:	Not applicable
Boiling Point:	No data available.
Flammability:	Not applicable

Upper/lower limit on flammability or explosive limits

Explosive limit - upper:	Not applicable
Explosive limit - lower:	Not applicable
Flash Point:	> 104 °F/> 40 °C (DIN EN ISO 2719)

Self Ignition Temperature:	Not determined.
Decomposition Temperature:	Not applicable
pH:	Not applicable substance/mixture reacts with water
Viscosity	
Dynamic viscosity:	1.9 mPa.s (68 °F/20 °C)
Kinematic viscosity:	No data available.
Flow Time:	Not applicable
Solubility(ies)	
Solubility in Water:	not miscible decomposition by hydrolysis
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	Not applicable
Vapor pressure:	Not applicable
Relative density:	Not applicable
Density:	0.94 g/cm ³ (68 °F/20 °C) (DIN 51757)
Bulk density:	Not applicable
Relative vapor density:	Not applicable

10. Stability and reactivity

Reactivity:	No dangerous reaction known under conditions of normal use.
Chemical Stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	No dangerous reactions known.
Conditions to avoid:	In the presence of oxygen and heat, the ethanol forming during the reaction may produce acetaldehyde. Material may form acetaldehyde when heated with inorganic pigments in the presence of air. Avoid high temperatures and sources of ignition.
Incompatible Materials:	Water.
Hazardous Decomposition Products:	Ethanol in case of hydrolysis. Alcohol formed by hydrolysis lowers the flash point of the product.

11. Toxicological information

Information on likely routes of exposure

Inhalation:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.
Ingestion:	No data available.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.
Ingestion:	No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: LD 50 (Rat): > 5,000 mg/kg

Dermal

Product: LD 50 (Rat): > 2,000 mg/kg

Inhalation

Product: LC 50 (Rat): 5.88 mg/l Dusts, mists and fumes

Repeated dose toxicity

Product: NOAEL (Rat, Oral): > 1,000 mg/kg

Skin Corrosion/Irritation

Product: Irritating. OECD 404 (Rabbit): Irritating.

Serious Eye Damage/Eye Irritation

Product: Not irritating Rabbit: Not irritating

Respiratory or Skin Sensitization

Product: Maximization Test, OECD 406 (Guinea Pig): Not a skin sensitizer.

Carcinogenicity

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

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogens present or none present in regulated quantities

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogens present or none present in regulated quantities

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:

No carcinogens present or none present in regulated quantities

Germ Cell Mutagenicity

In vitro

Product: Ames test (OECD 471): negative
Chromosomal aberration (OECD 473): negative
Chromosomal aberration (OECD 476): negative

In vivo

Product: Chromosomal aberration (OECD 474) Oral (Mouse, male and female):
negative

Reproductive toxicity

Product: No data available.

Components:

Isobutyltriethoxysilane Animal testing did not show any effects on fertility.

Specific Target Organ Toxicity - Single Exposure

Product: Based on available data, the classification criteria are not met.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: LC 50 (Oncorhynchus mykiss, 96 h): 85 mg/l (literature value)

Aquatic Invertebrates

Product: EC 50 (Daphnia magna, 48 h): > 49.1 mg/l

Toxicity to Aquatic Plants

Product: No data available.

Specified substance(s):

Isobutyltriethoxysilane No data available.

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: NOEC (Desmodesmus subspicatus (green algae), 72 h): ≥ 36 mg/l (OECD 201)

Specified substance(s):

Isobutyltriethoxysilane NOEC (Desmodesmus subspicatus (green algae), 72 h): ≥ 36 mg/l (OECD 201)

Persistence and Degradability

Biodegradation

Product: 75 % (28 d, OECD 301 D)

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: not bioaccumulative

Partition Coefficient n-octanol / water (log Kow)

Product: Log Kow: 2.033 Measured
Log Kow: > 2.03 literature

Mobility in soil: Adsorption on the floor: low.

Other adverse effects: The data we have at our disposal do not necessitate identification concerning environmental hazard.

13. Disposal considerations

Disposal methods: With respect to local regulations, e.g. dispose of to suitable waste incineration plant. Waste must be disposed of in accordance with federal, provincial, state and local regulations. Empty containers must be handled with care due to product residue. **DO NOT HEAT OR CUT THE EMPTY CONTAINER WITH AN ELECTRIC OR GAS TORCH.**

Contaminated Packaging: Do not reuse empty containers and dispose of in accordance with the regulations issued by the appropriate local authorities. If there is product residue in the emptied container, follow directions for handling on the container's label. Incorrect disposal or reuse of this container is illegal and can be dangerous. Other countries: observe the national regulations.

14. Transport information

Domestic regulation

49 CFR

UN/ID/NA number : UN 1993
Proper shipping name : Flammable liquids, n.o.s.
(contains ethanol)
Class : 3
Packing group : III
Labels : 3
ERG Code : 128
Marine pollutant : no

International Regulations

IATA-DGR

UN/ID No. : UN 1993
Proper shipping name : Flammable liquid, n.o.s.
(contains ethanol)
Class : 3
Packing group : III
Labels : 3
Packing instruction (cargo aircraft) : 366
Packing instruction (passenger aircraft) : 355

IMDG-Code

UN number or ID number : UN 1993
Proper shipping name : FLAMMABLE LIQUID, N.O.S.
(contains ethanol)
Class : 3
Packing group : III
Labels : 3
EmS Code : F-E, S-E
Marine pollutant : no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity

None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Flammable (gases, aerosols, liquids, or solids), Skin Corrosion or Irritation

US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

None present or none present in regulated quantities.

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65

No ingredient requiring a warning under CA Prop 65.

US. New Jersey Worker and Community Right-to-Know Act

Chemical Identity

Ethanol (Ethyl alcohol)

US. Massachusetts RTK - Substance List

No ingredient regulated by MA Right-to-Know Law present.

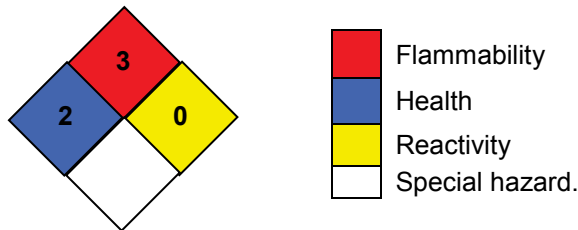
16. Other information, including date of preparation or last revision

HMIS Hazard ID

Health	2
Flammability	3
Physical Hazards	0
PERSONAL PROTECTION	

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

NFPA Hazard ID



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

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Further Information: No data available.