

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier**

**Product Name** **KC-644**

**Other means of identification**

**Product Code** 20644

**Recommended use of the chemical and restrictions on use**

**Recommended Use** Cleaner and Sanitizer

**Uses advised against** Follow the directions for use on the label when applying this product

**Details of the supplier of the safety data sheet**

**Manufacturer Address**

Safe Foods Chemical Innovations

1501 E. 8<sup>th</sup> Street

North Little Rock, AR 72114

**Emergency telephone number**

**Company Phone Number** 501-758-8500

**Emergency Telephone** Chemtrec 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

**Classification**

**OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Serious eye damage/eye irritation	Category 1
Skin corrosion/irritation	Category 2
Acute toxicity - Oral	Category 4

**Label elements**

**Emergency Overview**

**Danger**

**Hazard statements**

Causes serious eye damage

Causes skin irritation

Harmful if swallowed



**Appearance** Aqueous solution

**Physical state** Liquid

**Odor** Benzaldehyde

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Wear protective gloves/eye protection/face protection

**Precautionary Statements - Response**

Specific treatment (see Section 4 on SDS)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a poison center or doctor

IF ON SKIN: Wash with plenty of water and soap. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse

IF SWALLOWED: Call a poison center or doctor if you feel unwell. Rinse mouth

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not Applicable

**Other Information**

• Very toxic to aquatic life with long lasting effects

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	weight-%
Water	7732-18-5	88.5-89
Alkyl (C14, 50%; C12, 40%; C16-10%) Dimethyl Benzyl Ammonium Chloride	68424-85-1	4
Octyl Decyl Dimethyl Ammonium Chloride	32426-11-2	3
Dioctyl Dimethyl Ammonium Chloride	5538-94-3	1.5
Didecyl Dimethyl Ammonium Chloride	7173-51-5	1.5
Ethyl Alcohol	64-17-5	1-1.5

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

### 4. FIRST AID MEASURES

#### First aid measures

##### **General advice**

Have the product container, label, or SDS with you when calling a poison control center or doctor or going for treatment.

##### **Eye contact**

Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

##### **Skin contact**

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

##### **Inhalation**

Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice.

##### **Ingestion**

Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

#### Most important symptoms and effects, both acute and delayed

##### **Symptoms**

See Section 11 for symptom information.

#### Indication of any immediate medical attention and special treatment needed

##### **Note to physicians**

Probable mucosal damage may contraindicate the use of gastric lavage.

### 5. FIRE-FIGHTING MEASURES

#### Suitable extinguishing media

Dry chemical. Water spray (fog). Carbon dioxide (CO<sub>2</sub>). Foam.

**Unsuitable extinguishing media** No information available.

#### Specific hazards arising from the chemical

No information available.

**Hazardous combustion products** Toxic hydrogen chloride fumes. Carbon oxides. Nitrogen oxides (NO<sub>x</sub>).

#### Explosion data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

#### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Cool containers with flooding quantities of water until well after fire is out. Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.

### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures

##### **Personal precautions**

Use personal protection recommended in Section 8. Wear respirator. Ensure adequate ventilation, especially in confined areas.

##### **For emergency responders**

Isolate area. Keep unnecessary personnel away.

#### Environmental precautions

##### **Environmental precautions**

Prevent entry into waterways, sewers, basements or confined areas. See Section 12 for additional ecological information.

#### Methods and material for containment and cleaning up

##### **Methods for containment**

Prevent further leakage or spillage if safe to do so.

##### **Methods for cleaning up**

Small spills may be mopped up, flushed away with water or absorbed on some absorbent material and incinerated. For large spills: Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations.

### 7. HANDLING AND STORAGE

#### Precautions for safe handling

**Advice on safe handling** Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Use only in well-ventilated areas. Avoid breathing vapors or mists. Wash thoroughly after handling. Handle in accordance with good industrial hygiene and safety practice.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep from freezing. Store only in original container. Keep this product under locked storage sufficient to make it inaccessible to children or persons unfamiliar with its proper use.

**Incompatible materials** Strong oxidizing agents. Reducing agent.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethyl Alcohol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm, 1900 mg/m <sup>3</sup>	IDLH: 3300 ppm TWA: 1000 ppm, 1900 mg/m <sup>3</sup>

**Appropriate engineering controls**

**Engineering Controls** Showers, eyewash stations, ventilation system.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Splash proof chemical goggles and face shield.  
**Skin and body protection** Wear protective Neoprene™ gloves or rubber gloves. Wear suitable protective clothing and rubber boots.  
**Respiratory protection** When fogging or when exposure limits are exceeded or if irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** Wash face, hands and any exposed skin thoroughly after handling. Wash contaminated clothing and shoes before reuse. Do not eat, drink or smoke when using this product.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

<b>Physical state</b>	Liquid	<b>Odor</b>	Benzaldehyde
<b>Appearance</b>	Aqueous solution	<b>Odor threshold</b>	No information available
<b>Color</b>	Clear, Yellow	<b>Remarks • Method</b>	
<b>Property</b>	<b>Values</b>		
<b>pH</b>	7	±1 @ 21°C	
<b>Melting point/freezing point</b>	1.7 °C / 35 °F		
<b>Boiling point / boiling range</b>	No information available		
<b>Flash point</b>	> 93.3 °C / > 200 °F		
<b>Evaporation rate</b>	No information available		
<b>Flammability (solid, gas)</b>	No information available		
<b>Flammability Limit in Air</b>			
<b>Upper flammability limit:</b>	No information available		
<b>Lower flammability limit:</b>	No information available		
<b>Vapor pressure</b>	No information available		
<b>Vapor density</b>	No information available		
<b>Specific Gravity</b>	0.986 g/cc		
<b>Water solubility</b>	Soluble in water		
<b>Solubility in other solvents</b>	No information available		
<b>Partition coefficient</b>	No information available		
<b>Autoignition temperature</b>	No information available		
<b>Decomposition temperature</b>	No information available		
<b>Kinematic viscosity</b>	No information available		
<b>Dynamic viscosity</b>	No information available		
<b>Explosive properties</b>	No information available		
<b>Oxidizing properties</b>	No information available		
<b>VOC Content (%)</b>	1.4% (0.115 lbs/gal)		

**10. STABILITY AND REACTIVITY**

**Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

None known.

**Incompatible materials**

Strong oxidizing agents. Reducing agent.

**Hazardous Decomposition Products**

Toxic hydrogen chloride fumes. Carbon oxides. Nitrogen oxides (NOx).

**11. TOXICOLOGICAL INFORMATION**

**Information on likely routes of exposure**

**Product Information**

**Inhalation** Inhalation of vapors in high concentration may cause irritation of respiratory system. Vapors may be irritating to eyes, nose, throat, and lungs.

**Eye contact** Risk of serious damage to eyes. Corrosive to the eyes and may cause severe damage including blindness.

**Skin Contact** Corrosive. Contact causes severe skin irritation and possible burns.

**Ingestion** Harmful if swallowed. May cause burning pain in mouth, throat, abdomen, severe swelling of the larynx, skeletal muscle paralysis affecting the ability to breathe, circulatory shock, convulsions when swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Alkyl (C14, 50%; C12, 40%; C16-10%) Dimethyl Benzyl Ammonium Chloride 68424-85-1	= 426 mg/kg ( Rat )	-	-
Octyl Decyl Dimethyl Ammonium Chloride 32426-11-2	= 238 mg/kg	= 3342 mg/kg	-
Diocetyl Dimethyl Ammonium Chloride 5538-94-3	= 238 mg/kg	= 3342 mg/kg	-
Didecyl Dimethyl Ammonium Chloride 7173-51-5	= 84 mg/kg ( Rat )	= > 1000 mg/kg (Rat)	-
Ethyl Alcohol 64-17-5	= 7060 mg/kg ( Rat )	-	= 124.7 mg/L ( Rat ) 4 h

**Information on toxicological effects**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage.

Chemical Name	ACGIH	IARC	NTP	OSHA
Ethyl Alcohol - 64-17-5	A3	-	Known	X

*ACGIH (American Conference of Governmental Industrial Hygienists)*  
*A3 - Animal Carcinogen*  
*NTP (National Toxicology Program)*  
*Known - Known Carcinogen*  
*OSHA (Occupational Safety and Health Administration of the US Department of Labor)*  
*X - Present*

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

**Numerical measures of toxicity - Product Information**

**Unknown Acute Toxicity** 0% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document

**Oral LD50** 862.00 mg/kg  
**Dermal LD50** 34,259.00 mg/kg  
**Mist** 9,976.00 mg/l

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

Very toxic to aquatic life with long lasting effects

0.005% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Fish	Crustacea
Ethyl Alcohol 64-17-5	13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through 12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static	9268 - 14221: 48 h Daphnia magna mg/L LC50 10800: 24 h Daphnia magna mg/L EC50 2: 48 h Daphnia magna mg/L EC50 Static

**Persistence and degradability**

No information available.

**Bioaccumulation**

Chemical Name	Partition coefficient
Ethyl Alcohol - 64-17-5	-0.32

**Mobility**

Soluble in water.

**Other adverse effects** No information available

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Disposal of wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging** Dispose of in accordance with federal, state and local regulations.

Chemical Name	California Hazardous Waste Status	
Ethyl Alcohol - 64-17-5	Toxic	Ignitable

**14. TRANSPORT INFORMATION**

**DOT**

<b>UN/ID No.</b>	1903
<b>Proper shipping name</b>	Disinfectants, liquid, corrosive, n.o.s. (contains quaternary ammonium compounds)
<b>Hazard Class</b>	8
<b>Packing Group</b>	II
<b>Emergency Response Guide Number</b>	153

**15. REGULATORY INFORMATION**

**International Inventories**

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Complies

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**US Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

<b>Acute health hazard</b>	Yes
<b>Chronic Health Hazard</b>	No
<b>Fire hazard</b>	No
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	No

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations**

**California Proposition 65**

Ethyl alcohol is only considered a Proposition 65 developmental hazard when it is ingested as an alcoholic beverage.

Chemical Name	California Proposition 65	
Ethyl Alcohol - 64-17-5	Carcinogen	Developmental

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Ethyl Alcohol - 64-17-5	X	X	X

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** 63679-2

**16. OTHER INFORMATION**

<b>NFPA</b>	<b>Health hazards</b> 3	<b>Flammability</b> 0	<b>Instability</b> 0	<b>Physical and Chemical Properties</b> Corrosive
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<b>HMIS</b>	<b>Health hazards</b> 3	<b>Flammability</b> 0	<b>Physical hazards</b> 0	<b>Personal protection</b> X – Consult your supervisor or SOP for special handling instructions.
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<b>Prepared By</b>	Technical Department
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<b>Revision Note</b>	Company name update.

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The health hazards given on this SDS apply to this product in its concentrated form (as supplied) and may differ significantly at use dilution. The signs and symptoms of exposure apply only to negligence in handling or misuse of the concentrated product and not to the routine exposure of the diluted product under conditions of ordinary use.

End of Safety Data Sheet