

**Safety Data Sheet (SDS)**  
**KilZone Cleaner & Disinfectant**

## **Global Ozone Innovations, LLC**

SDS Revision Date: 06/02/2015

SDS Original Date: 05/01/2015

### **1. Identification of the substance/mixture and of the company/undertaking**

#### **1.1. Product identifier**

**Product Identity** KilZone Cleaner & Disinfectant

**Alternate Names** KilZone Cleaner & Disinfectant

#### **1.2 Relevant identified uses of the substance or mixture and uses advised against**

**Intended use** Contact Global Ozone Innovations representative

**Application Method** Contact Global Ozone Innovations representative

#### **1.3 Details of the supplies of the safety data sheet**

**Company Name** Global Ozone Innovations, LLC  
425 Pine Creek Court  
Elkhart, IN 46516

**EPA Number:** 10324-117-85841

**Establishment Number:** 85841-IN-1

#### **Emergency**

**CHEMTREC (USA)** (800) 424-9300

**Customer Service: Global Ozone Innovations** (877) 264-6062

### **2. Hazard identification of the product**

#### **2.1 Classification of the substance or mixture**

**Skin Corr. 1B;H314** Causes severe skin burns and eye damage.

**Eye Dam. 1;H318** Causes serious eye damage.

**Acute Tox. 5;H303** May be harmful if swallowed. (Not adopted by US OSHA)

**Aquatic Chronic 2;H411** Toxic to aquatic life with long lasting effects.

#### **2.2 Label elements**

Using the Toxicity Data listed in section 11 and 12, the product is labeled as follows.

**Danger**



H314 Causes severe skin burns and eye damage.  
 H318 Causes serious eye damage.  
 H303 May be harmful if swallowed. (Not adopted by US OSHA)  
 H411 Toxic to aquatic life with long lasting effects.

**(Prevention):**

P264 Wash thoroughly after handling.  
 P280 Wear protective gloves / eye protection / face protection.

**(Response):**

P305+352 IF ON SKIN: Wash with plenty of soap and water.  
 P305+351+338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.  
 P310 Immediately call a POISON CENTER or doctor/physician.  
 P321 Specific treatment (see information on this label).  
 P362 Take off contaminated clothing and wash before reuse.

**(Storage):**

No GHS storage statements

**(Disposal):**

No GHS disposal statements

**3. Composition/information on ingredients**

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Quaternary Ammonium Compounds, Benzyl-C12-C16-alkyldimethyl, Chlorides CAS#: 68424-85-1	2.00 – 4.00%	Flam. Liq. 3; H226 Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	(1)
1-decanaminium, n, n-dimethyl-n-octyl-, Chloride CAS #: 32426-11-2	2.00 – 4.00%		
1-octanaminium, N, n-dimethyl-n-octyl-, Chloride CAS #: 5538-94-3	1.0 – 2.0%		
Didecyldimethyl ammonium chloride CAS#: 7173-51-5	1.0 – 2.0%		
Ethanol CAS#: 64-17-5	<2%		

- (1) Substance classified with a health or environmental hazard.
- (2) Substance with a workplace exposure limit.
- (3) PBT-substance or vPv-substance.

\*The full texts of the phrases are shown in Section 16.

Trace components: Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, reproductive toxins, respiratory tract mutagens, and sensitizers). None of the trace ingredients contribute significant additional hazards at the concentrations present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents, and Canadian Hazardous Materials Identification System Standard (CPR 4).

## **4. First aid measures**

### **4.1 Description of first aid measures**

<b>General</b>	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
<b>Inhalation</b>	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. In unconscious place in the recovery position and obtain immediate medical attention. Giving nothing by mouth.
<b>Eyes</b>	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
<b>Skin</b>	If product contaminates the skin, immediately begin decontamination with running water. Minimum flushing is for 15 minutes. Remove contaminated clothing, taking care not to contaminate eyes. If skin becomes irritated and irritation persists, medical attention may be necessary. Wash contaminated clothing before reuse, discard contaminated shoes.
<b>Ingestion</b>	If swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. If professional advice is not available, give two glasses of water to drink. DO NOT INDUCE VOMITING. Never induce vomiting or give liquids to someone who is unconscious, having convulsions, or unable to swallow. Seek immediate medical attention.

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

<b>Overview</b>	No specific symptom data available. See section 2 for further details.
<b>Eyes</b>	Causes serious eye damage.
<b>Skin</b>	Causes skin irritation.

## **5. Fire-fighting measures**

### **5.1 Extinguishing media**

Recommended extinguishing media; alcohol resistant foam, CO2, powder, water spray.  
Do not use; water jet.

### **5.2 Special hazards arising from the substance or mixture**

Hazardous decomposition: No hazardous decomposition data available.

### **5.3 Advice for fire-fighters**

Cool closed containers exposed to fire by spraying them with water. Do not allow runoff water and contaminants from fire fighting to enter drains or water ways.

ERG Guide No. 153

## 6. Accidental release measures

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

Put on appropriate personal protective equipment (see section 8).

### 6.2 Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet.

Promptly remove soiled clothing and wash thoroughly before reuse.

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

Ventilate the area and avoid breathing vapors. Take the personal protective measures listed in section 8.

Contain and absorb spillage with non-combustible materials e.g. sand, earth, and vermiculite. Place in closed containers outside buildings and dispose of according to the Waste Regulations. (See section 13).

Clean, preferably with a detergent. Do not use solvents.

Do not allow spills to enter drains or watercourses.

If drains, sewers, streams or lakes are contaminated, inform the local water company immediately. If the case of contamination of rivers, streams or lakes, contact the Environmental Protection Agency should also be informed.

## 7. Handling and storage

### 7.1 Precautions for safe handling

See section 2 for further details. – (Prevention):

### 7.2 Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Incompatible materials: No data available.

See section 2 for further details. – (Storage):

### 7.3 Specific end use(s)

No data available.

## 8. Exposure controls and personal protection

### 8.1 Control parameters

CAS No.	Ingredient	Exposure	
		Source	Value

68424-85-1	Quaternary Ammonium Compounds, Benzyl-C12-C16-alkyldimethyl, Chlorides	OSHA	No Establishment Limit
		ACGIH	No Establishment Limit
		NIOSH	No Establishment Limit
		Supplier	No Establishment Limit
32426-11-2	1-decanaminium,n,n-dimethyl-n-octyl-, Chloride	OSHA	No Establishment Limit
		ACGIH	No Establishment Limit
		NIOSH	No Establishment Limit
		Supplier	No Establishment Limit
5538-94-3	1-octanaminium, N,n-dimethyl-n-octyl-, Chloride	OSHA	No Establishment Limit
		ACGIH	No Establishment Limit
		NIOSH	No Establishment Limit
		Supplier	No Establishment Limit
7173-51-5	Didecyldimethyl ammonium chloride	OSHA	No Establishment Limit
		ACGIH	No Establishment Limit
		NIOSH	No Establishment Limit
		Supplier	No Establishment Limit
64-17-5	Ethanol	OSHA	1000 ppm (TWA)
		ACGIH	1000 ppm (TWA)
		NIOSH	1000 ppm (TWA)
		Supplier	No Establishment Limit

Carcinogen Data			
CAS No.	Ingredient	Source	Value
68424-85-1	Quaternary Ammonium Compounds, Benzyl-C12-C16-alkyldimethyl, Chlorides	OSHA	Select Carcinogen: No
		ACGIH	Known: No; Suspected: No
		NIOSH	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No
32426-11-2	1-decanaminium,n,n-dimethyl-n-octyl-, Chloride	OSHA	Select Carcinogen: No
		ACGIH	Known: No; Suspected: No
		NIOSH	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No
5538-94-3	1-octanaminium, N,n-dimethyl-n-octyl-, Chloride	OSHA	Select Carcinogen: No
		ACGIH	Known: No; Suspected: No
		NIOSH	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No
7173-51-5	Didecyldimethyl ammonium chloride	OSHA	Select Carcinogen: No
		ACGIH	Known: No; Suspected: No
		NIOSH	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No
64-17-5	Ethanol	OSHA	Select Carcinogen: No
		ACGIH	Known: No; Suspected: No
		NIOSH	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No

## 8.2 Exposure controls

### Respiratory

Use NIOSH/MSHA approved respirator, following manufacturer's recommendations when concentrations exceed permissible exposure limits.

- Eyes** Wear safety glasses with side shields to protect the eyes. An eye wash station is suggested as a good workplace practice.
- Skin** Chemical resistant clothing such as coveralls/apron boots should be worn. Chemical Impervious Gloves.
- Engineering Controls** Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.
- Other Work Practices** Use good personal hygiene practices. Wash hands before eating, drinking, smoke or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. – (Prevention):

## 9. Physical and chemical properties

<b>Appearance</b>	Light yellow thin liquid
<b>Odor</b>	Mild
<b>Odor threshold</b>	Not Measured
<b>pH</b>	6.0 – 7.5
<b>Melting point / freezing point</b>	Not Measured
<b>Initial boiling point and boiling range</b>	>212 deg F
<b>Flash point</b>	>200 degrees F PMCC (non-flammable)
<b>Evaporation rate (Ether =1)</b>	0.33
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Upper/lower flammability or explosive limits</b>	<b>Lower Explosive Limit:</b> Not Measured
	<b>Upper Explosive Limit:</b> Not Measured
<b>Vapor pressure (Pa)</b>	Not Determined
<b>Vapor density</b>	Not Determined
<b>Specific gravity</b>	0.996 – 1.000
<b>Solubility in water</b>	Not Measured
<b>Partition coefficient n-octanol/water (Log Kow)</b>	Not Measured
<b>Auto-ignition temperature</b>	Not Measured
<b>Decomposition temperature</b>	Not Measured
<b>Viscosity (cSt)</b>	Not Measured
<b>Foaming</b>	Moderate

### 9.2 Other information

No other relevant information.

## 10. Stability and reactivity

### 10.1 Reactivity

Hazardous Polymerization will not occur.

### 10.2 Chemical Stability

Stable under normal circumstances.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

No data available

### 10.5 Incompatible materials

No data available

### 10.6 Hazardous decomposition products

No data available

## 11. Toxicological information

### Acute toxicity

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LD50, mg//4hr	Inhalation Dust/Mist LD50, mg/L/4hr	Inhalation Gas LD50, ppm
Quaternary Ammonium Compounds, Benzyl-C12-C16-alkyldimethyl, Chlorides 68424-85-1	344.00, Rat- Category: 4	645.00 Rabbit- Category: 3	No data available	No data available	No data available
1-decanaminium, n,n-dimethyl-n-octyl-, Chloride 32426-11-2	238	3342	No data available	No data available	No data available
1-octanaminium, N,n-dimethyl-n-octyl-, Chloride 5538-94-3	238	3342	No data available	No data available	No data available
Didecyldimethyl ammonium chloride 7173-51-5	238	3342	No data available	No data available	No data available
Ethanol 64-17-5	3450, Mouse 7060, Rat Category: 4	No data available	117-125	No data available	No data available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	1B	Causes skin irritation.
Serious eye damage/irritation	1	Causes serious eye damage.
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

## 12. Ecological information

### 12.1 Toxicity

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and GHS and is not classified as dangerous for the environment, but contains substance(s) dangerous for the environment. See section 3 for details.

Ingredient	Aquatic Ecotoxicity		
	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Quaternary Ammonium Compounds, Benzyl-C12-C16-alkyldimethyl, Chlorides (68424-85-1)	0.28, Pimephales	0.0042, Daphnia	0.04 (72hr.)
1-decanaminium, n,n-dimethyl-n-octyl-, Chloride (32426-11-2)	.032, Bluegill (Lepomis macrochirus)	.01, Daphnia	Not Available
1-octanaminium, N,n-dimethyl-n-octyl-, Chloride (5538-94-3)	.032, Bluegill (Lepomis macrochirus)	.01, Daphnia	Not Available
Didecyldimethyl ammonium chloride (7173-51-5)	.97, Danio rerio	.057, Daphnia	.062 (72hr.)
Ethanol (64-17-5)	>100, Pimphales	>100, Daphnia	>100

### 12.2 Persistence and degradability

There is no data available on the preparation itself.



**12.3 Bioaccumulative potential**

Not measured

**12.4 Mobility in soil**

No data available.

**12.5 Degradability**

This product is completely biodegradable.

**12.6 Results of PBT and vPvB assessment**

This product contains no PBT/VPVB chemicals.

**12.7 Other adverse effects**

No data available

**13. Disposal consideration**

**13.1 Waste treatment methods**

Observe all federal, state and local regulations when disposing of this substance.

**14. Transport information**

<b>14.1 UN number</b>	UN1903
<b>14.2 UN proper shipping name</b>	DISINFECTANTS, LIQUID, CORROSIVE N.O.S., (Quaternary Ammonium Compounds)
<b>14.3 Transport hazard class(es)</b>	8
<b>14.4 Packing group</b>	III
<b>14.5 Reportable Quantity</b>	None

**15. Regulatory information**

<b>Regulatory overview</b>	The regulatory data in section 15 is not intended to be all-inclusive, only selected regulations are represented.
<b>Toxic Substance</b>	All components of this material are either listed or exempt from listing on the TSCA
<b>Control Act (TSCA)</b>	Inventory.
<b>WHMIS Classification</b>	D2B E
<b>US EPA Tier II Hazards</b>	<b>Fire:</b> No <b>Sudden Release of Pressure:</b> No <b>Reactive:</b> No <b>Immediate (Acute):</b> Yes <b>Delayed (Chronic):</b> No
<b>EPCRA 311/312 Chemicals and RQs (lbs):</b> (No Product Ingredients Listed)	
<b>EPCRA 302 Extremely Hazardous:</b>	

(No Product Ingredients Listed)

**EPCRA 313 Toxic Chemicals:**

(No Product Ingredients Listed)

**Proposition 65 – Carcinogens (>0.0%):**

(No Product Ingredients Listed)

**Proposition 65 – Developmental Toxins (>0.0%):**

(No Product Ingredients Listed)

**Proposition 65 – Female Repro Toxins (>0.0%):**

(No Product Ingredients Listed)

**Proposition 65 – Male Repro Toxins (>0.0%):**

(No Product Ingredients Listed)

**N.J. RTK Substances (>1%):**

(No Product Ingredients Listed)

**Penn RTK Substances (>1%):**

(No Product Ingredients Listed)

**16. Other information**

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this products must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H226 Flammable liquid and vapor.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H318 causes serious eye damage.

H350i May cause cancer if inhaled.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

**This is the first version in the GHS SDS format. Listings of changes from previous versions in other formats are not applicable.**

Revision Date: 06/02/2015

End of Document