

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Trade name : EZ-Guard Disinfecting Spray

1.2. Recommended use and restrictions on use

Recommended use : Disinfectant
Restrictions on use : All other uses not recommended above

1.3. Supplier

Best Sanitizers Inc
PO Box 1360
Penn Valley, California 95946
T 888-225-3267
sales@bestsanitizers.com

1.4. Emergency telephone number

Emergency number : For Hazardous Materials or Dangerous Goods Incident Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night: 1-800-424-9300 (Toll Free, USA) / 703-527-3887 (Virginia, USA)
CCN 2655

SECTION 2: Hazard(s) identification



2.1. Classification of the substance or mixture

GHS US classification

Flammable liquids Category 2 : Highly flammable liquid and vapor
Serious eye damage/eye irritation Category 2A : Causes serious eye irritation
Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :  

Signal word (GHS US) : Danger

Hazard statements (GHS US) : Highly flammable liquid and vapor
Causes serious eye irritation

Precautionary statements (GHS US) : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Keep container tightly closed.
Ground/Bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Wash hands, forearms and face thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
In case of fire: Use media other than water to extinguish.

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Store in a well-ventilated place. Keep cool.

Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Ethanol	CAS-No.: 64-17-5	72.5	Flam. Liq. 2, H225 Eye Irrit. 2A, H319
Didecyl dimethyl ammonium chloride	CAS-No.: 7173-51-5	0.33	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	: First aider: Pay attention to self-protection. Never give anything by mouth to an unconscious person. Give artificial respiration if necessary. Induce artificial respiration with mask fitted with one-way valve or other suitable device but not mouth-to-mouth.
First-aid measures after inhalation	: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If the victim is unconscious : Lay in a stable manner on victim's side. Get immediate medical advice/attention.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth out with water. Drink plenty of water. Do NOT induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation	: May cause shortness of breath, tightness of the chest, a sore throat and cough. Depression of the central nervous system, headaches, dizziness, drowsiness, loss of coordination.
Symptoms/effects after skin contact	: Repeated exposure may cause skin dryness or cracking. Slight irritation.
Symptoms/effects after eye contact	: Stinging, redness, itching, tears, blurred vision, swelling.
Symptoms/effects after ingestion	: Burning sensation. May cause irritation to the digestive tract.
Most Important Symptoms/Effects	: Irritation to eyes, skin and respiratory tract. Depression of the central nervous system, headaches, dizziness, drowsiness, loss of coordination.

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4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Dry chemical, CO₂, dry sand, or alcohol-resistant foam.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : Highly flammable liquid and vapor. The vapors are denser than air and may travel along the ground. Distance ignition possible.
Explosion hazard : Vapors in confined areas may explode when exposed to fire.
Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon dioxide. Carbon monoxide.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Evacuate area. Fight fire with normal precautions from a reasonable distance. Do not enter fire area without proper protective equipment, including respiratory protection. Eliminate all ignition sources if safe to do so.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Wear the recommended personal protective equipment.
Emergency procedures : Evacuate the danger area. If outdoors, move to an area upwind of the danger area. If possible without taking personal risks, remove ignition sources, ventilate area. Avoid contact with skin and eyes. Prevent other non-emergency personnel from entering the danger area.

6.1.2. For emergency responders

Protective equipment : Wear the recommended personal protective equipment.
Emergency procedures : Evacuate personnel to a safe area. Ventilate spillage area.

6.2. Environmental precautions

Do not let the product reach soil, drains, sewers, or surface and ground water.

6.3. Methods and material for containment and cleaning up

For containment : Contain with non-combustible inert absorbent.
Methods for cleaning up : Take up liquid spill into absorbent material. Contaminated absorbent material may pose the same hazard as the spilled product. Decontaminate surfaces and equipment with water and detergent. Until a sufficient level of dilution is achieved, the decontamination water may pose the same hazards as the product.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Use only in well-ventilated areas. Wear personal protective equipment when handling bulk product. Avoid contact with eyes. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Use explosion-proof equipment.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling bulk product.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed.
- Incompatible materials : Strong oxidizing agents.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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No additional information available

Ethanol (64-17-5)

USA - ACGIH - Occupational Exposure Limits

Local name	Ethanol
ACGIH OEL STEL	1000 ppm
Remark (ACGIH)	TLV® Basis: URT irr. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
Regulatory reference	ACGIH 2024

USA - OSHA - Occupational Exposure Limits

Local name	Ethyl alcohol (Ethanol)
OSHA PEL TWA	1900 mg/m ³ 1000 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

Didecyl dimethyl ammonium chloride (7173-51-5)

No additional information available

8.2. Appropriate engineering controls

- Appropriate engineering controls : Use general ventilation, local exhaust ventilation or process enclosure to keep the airborne concentrations below the permissible exposure limits.
- Environmental exposure controls : Avoid release to the environment. Take measures to reduce or limit air emissions and releases to soil and the aquatic environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Personal protective equipment should be chosen according to national standards and in discussion with the supplier of the protective equipment.

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Hand protection:

Hand protection should be chosen depending on activity. Professional use: Rubber protective gloves with a permeation time of 480 minutes for each ingredient of this mixture. Consumer use: No special protection required

Eye protection:

Safety glasses

Skin and body protection:

Body protection should be chosen depending on activity and possible exposure. Chemical resistant apron. Antistatic clothing

Respiratory protection:

Use NIOSH approved respirator if ventilation is inadequate. SCBA for emergency responders. Must be used in accordance with an OSHA compliant respiratory protection program.

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid.
Appearance	: Clear liquid.
Color	: Colorless
Odor	: Alcohol.
Odor threshold	: No data available
pH	: 3.7 (77 °F)
pH solution	: 6 – 9
Melting point	: No data available
Freezing point	: No data available
Boiling point	: (172.4 °F) (Ethanol)
Flash point	: 65.3 °F
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 3.23 cSt @ 68 °F
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

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SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapor.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. No flames, no sparks. Eliminate all sources of ignition. Incompatible materials.

10.5. Incompatible materials

Oxidizing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition generates : Carbon dioxide. Carbon monoxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Ethanol

LD50 oral rat	7060 mg/kg body weight
LD50 oral	8300 mg/kg body weight
LD50 dermal rabbit	> 18000 mg/kg body weight
LC50 Inhalation - Rat	124.7 mg/l/4h

Didecyl dimethyl ammonium chloride (7173-51-5)

LD50 dermal rat	> 1000 mg/kg body weight
LD50 dermal rabbit	≈ 3342 mg/kg body weight
ATE US (oral)	500 mg/kg body weight

Skin corrosion/irritation : Not classified
pH: 3.7 (77 °F)

Ethanol

Skin corrosion/irritation, rabbit : Not irritating to rabbits on cutaneous application

Serious eye damage/irritation : Causes serious eye irritation.
pH: 3.7 (77 °F)

Ethanol

Serious eye damage/irritation, rabbit : Moderately irritating

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Respiratory or skin sensitization : Not classified

Ethanol

Skin sensitization, mouse	Not sensitive
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified

Ethanol

NOAEL (subchronic,oral,animal/male,90 days)	< 9700 mg/kg body weight
NOAEL (subchronic,oral,animal/female,90 days)	> 9400 mg/kg body weight

Aspiration hazard : Not classified
Viscosity, kinematic : No data available

Didecyl dimethyl ammonium chloride (7173-51-5)

Viscosity, kinematic $\approx 24.5 \text{ mm}^2/\text{s}$

Symptoms/effects after inhalation : May cause shortness of breath, tightness of the chest, a sore throat and cough. Depression of the central nervous system, headaches, dizziness, drowsiness, loss of coordination.

Symptoms/effects after skin contact : Repeated exposure may cause skin dryness or cracking. Slight irritation.

Symptoms/effects after eye contact : Stinging, redness, itching, tears, blurred vision, swelling.

Symptoms/effects after ingestion : Burning sensation. May cause irritation to the digestive tract.

Most Important Symptoms/Effects : Irritation to eyes, skin and respiratory tract. Depression of the central nervous system, headaches, dizziness, drowsiness, loss of coordination.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Ethanol

LC50 - Fish [1]	14.2 g/l
NOEC (chronic)	9.6 mg/l

Didecyl dimethyl ammonium chloride (7173-51-5)

LC50 - Fish [1]	$\approx 0.97 \text{ mg/l}$
EC50 - Crustacea [1]	$\approx 0.057 \text{ mg/l}$
LC50 - Fish [2]	$\approx 0.49 \text{ mg/l}$
EC50 - Crustacea [2]	$\approx 0.029 \text{ mg/l}$
EC50 72h - Algae [1]	$\approx 0.062 \text{ mg/l}$
LOEC (chronic)	$\approx 0.047 \text{ mg/l}$
NOEC (chronic)	$\approx 0.021 \text{ mg/l}$

12.2. Persistence and degradability

No additional information available

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12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available


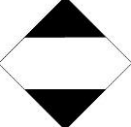

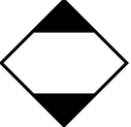


SECTION 13: Disposal considerations

13.1. Disposal methods

Regional waste regulation	: Disposal must be done according to official regulations. U.S. - RCRA (Resource Conservation Recovery Act) - D Waste- Characteristic Waste Codes. D001: IGNITABLE WASTE.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Dispose of this material and its container at hazardous or special waste collection point. Refer to all applicable national, international and local regulations or provisions.
Additional information	: Flammable vapors may accumulate in the container.
Ecological information	: Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

DOT	IMDG	IATA
14.1. UN number		
1170	1170	1170
14.2. Proper Shipping Name		
Ethanol solutions	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)	Ethanol solution
14.3. Transport hazard class(es)		
3 (LTD QTY)	3	3
 	 	 
14.4. Packing group		
III	III	III
14.5. Environmental hazards		
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No
No supplementary information available		

14.6. Special precautions for user

DOT
UN-No.(DOT) : UN1170

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DOT Packaging Exceptions (49 CFR 173.xxx)	: 4b;150
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 203
DOT Packaging Bulk (49 CFR 173.xxx)	: 242
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 220 L
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

IMDG	
Special provision (IMDG)	: 144, 223
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P001, LP01
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T2
Tank special provisions (IMDG)	: TP1
EmS-No. (Fire)	: F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS
EmS-No. (Spillage)	: S-D - SPILLAGE SCHEDULE Delta - FLAMMABLE LIQUIDS
Stowage category (IMDG)	: A
Properties and observations (IMDG)	: Colourless, volatile liquids. Pure ETHANOL: flashpoint 13°C c.c. Explosive limits: 3.3% to 19%. Miscible with water.

IATA	
PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y344
PCA limited quantity max net quantity (IATA)	: 10L
PCA packing instructions (IATA)	: 355
PCA max net quantity (IATA)	: 60L
CAO packing instructions (IATA)	: 366
CAO max net quantity (IATA)	: 220L
ERG code (IATA)	: 3L

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

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

CANADA

Ethanol (64-17-5)

Listed on the Canadian DSL (Domestic Substances List)

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Didecyl dimethyl ammonium chloride (7173-51-5)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

Ethanol (64-17-5)

Listed on IARC (International Agency for Research on Cancer)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

Didecyl dimethyl ammonium chloride (7173-51-5)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

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Full text of H-phrases

H225	Highly flammable liquid and vapor
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H319	Causes serious eye irritation

Abbreviations and acronyms

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association

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Abbreviations and acronyms	
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.