SAFETY DATA SHEET

SECTION 1) CHEMICAL PRODUCT AND MANUFACTURER'S IDENTIFICATION

Product ID:	495565				
Product Name:	Zenatize Citrus Disinfectant				
Revision Date:	Nov 22, 2019	Date Printed:	Nov 22, 2019		
Version:	2.0	Supersedes Date:	Aug 26, 2019		
Manufacturer's Name:	Zenex International				
Address:	1 Zenex Circle Cleveland, OH, US, 44146				
Emergency Phone:	1-800-535-5053				
Information Phone Number	er: (440)-232-4155				
Fax:					
Product/Recommended U	ommended Uses: Disinfectant				

SECTION 2) HAZARDS IDENTIFICATION

Classification

Aerosols - Category 1

Gases Under Pressure - Compressed Gas

Skin Sensitization - Category 1

Skin Irritation - Category 2 Eye Irritation - Category 2A

Specific Target Organ Toxicity - Single Exposure (Respiratory Tract Irritation) - Category 3

Specific Target Organ Toxicity - Single Exposure (Narcotic Effects) - Category 3

Specific Target Organ Toxicity - Repeated Exposure - Category 2

Aspiration Hazard - Category 1

Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 4.7%

Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 41.7%

Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 4.7%

Pictograms



Signal Word

Danger

Hazardous Statements - Physical

H222 - Extremely flammable aerosol.

H280 - Contains gas under pressure; may explode if heated.

Hazardous Statements - Health

H304 - May be fatal if swallowed and enters airways.

- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H315 Causes skin irritation.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements - General

- P101 If medical advice is needed, have product container or label at hand.
- P102 Keep out of reach of children.
- P103 Read label before use.

Precautionary Statements - Prevention

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P211 Do not spray on an open flame or other ignition source.
- P251 Do not pierce or burn, even after use.
- P280 Wear protective gloves, eye protection and face protection.
- P264 Wash hands thoroughly after handling.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P260 Do not breathe mist, vapors, or spray.
- P271 Use only outdoors or in a well-ventilated area.

Precautionary Statements - Response

- P314 Get medical attention if you feel unwell.
- P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor.
- P331 Do NOT induce vomiting.
- P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P312 Call a POISON CENTER or doctor if you feel unwell.
- P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
- P362 + P364 Take off contaminated clothing and wash it before reuse.
- P333 + P313 If skin irritation or rash occurs: Get medical attention.
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
- Continue rinsing.
- P337 + P313 If eye irritation persists: Get medical attention.

Precautionary Statements - Storage

- P405 Store locked up.
- P410 Protect from sunlight.
- P412 Do not expose to temperatures exceeding 50°C / 122°F.
- P403 Store in a well-ventilated place.

Precautionary Statements - Disposal

P501 - Dispose of contents and container in accordance with local, regional, national and international regulations.

Supplementary Information

DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

Please refer to the SDS for additional information. Keep out of reach of children. Keep upright in a cool, dry place. Do not discard empty can in trash compactor.

SECTION 3) COMPOSITION, INFORMATION ON INGREDIENTS

CAS	Chemical Name	% By Weight
0000064-17-5	ETHYL ALCOHOL	25% - 50%
0000106-97-8	BUTANE	10% - 25%
0000074-98-6	PROPANE	1% - 5%
Confidential	ODORANT	≤0.3%

Specific chemical identity and/or exact percentage (concentration) of the composition has been withheld to protect confidentiality.

SECTION 4) FIRST-AID MEASURES

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

Eye Contact

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Skin Contact

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. In the event of any complaints, avoid further exposure.

Ingestion

Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing media suitable for surrounding fire.

Unsuitable Extinguishing Media

None known.

Specific Hazards in Case of Fire

Extremely flammable aerosol. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed.

In fire, will decompose to carbon dioxide, carbon monoxide.

Fire-Fighting Procedures

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special Protective Actions

Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Emergency Procedure

Small spill: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment

plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Recommended Equipment

Wear appropriate protective equipment (see Section 8).

Personal Precautions

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Environmental Precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

SECTION 7) HANDLING AND STORAGE

General

Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid breathing gas. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.

Ventilation Requirements

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source.

Storage Room Requirements

Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials and food and drink. Protect from sunlight. Store locked up. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection

Safety glasses with side shields should be used if indicated. Eye wash and safety showers in the workplace are recommended.

Skin Protection

Use solvent-resistant protective gloves for prolonged or repeated contact.

Respiratory Protection

Avoid breathing vapors. In restricted areas, use approved chemical/mechanical filters designed to remove a combination of particles and vapor. In confined areas, use an approved air line respirator or hood. A self-contained breathing apparatus is required for vapor concentrations above PEL/TLV limits.

Appropriate Engineering Controls

Ventilation should be sufficient to prevent inhalation of any vapors.

Chemical Name	OSHA TWA (ppm)	OSHA TWA (mg/m3)	OSHA STEL (ppm)	OSHA STEL (mg/m3)	OSHA Tables (Z1, Z2, Z3)	OSHA Carcinogen	OSHA Skin designation	NIOSH TWA (ppm)
BUTANE								800
ETHYL ALCOHOL	1000	1900			1			1000
PROPANE	1000	1800			1			1000

Chemical Name	NIOSH TWA (mg/m3)	NIOSH STEL (ppm)	NIOSH STEL (mg/m3)	NIOSH Carcinogen	ACGIH TWA (ppm)	ACGIH TWA (mg/m3)	ACGIH STEL (ppm)	ACGIH STEL (mg/m3)
BUTANE	1900						1000 (EX)	
ETHYL ALCOHOL	1900						1000	

495565



SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Density	6.90 lb/gal			
Density VOC	2.50 lb/gal			
% VOC	36.20%			
Appearance	Liquid			
Odor Threshold	N.A.			
Odor Description	N.A.			
pH	10			
Water Solubility	N.A.			
-				
Flammability	Flash point below 73°F/23°C			
Vapor Pressure	101.3 kPa (20°C)			
Flash Point	-29°C (-20.2°F) [Pensky-Martens Closed Cup]			
Viscosity, Kinematic	<0.205 cm²/s (40°C)			
Lower Explosion Level	1.9%			
Upper Explosion Level	19%			
Vapor Density	1 (air = 1)			
Melting Point	N.A.			
Freezing Point	N.A.			
Low Boiling Point	N.A.			
High Boiling Point	N.A.			
Decomposition Pt	N.A.			
Auto Ignition Temp	N.A.			
Evaporation Rate	1.6 (butyl acetate = 1)			

SECTION 10) STABILITY AND REACTIVITY

Stability

Stable.

Conditions to Avoid

Keep away from heat, sparks, extreme temperatures, flame, other sources of ignition and incompatible materials.

Incompatible Materials

None known.

Hazardous Reactions/Polymerization

Under normal conditions of storage and use, hazardous reactions will not occur.

Hazardous Decomposition Products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11) TOXICOLOGICAL INFORMATION

Skin Corrosion/Irritation

Causes skin irritation.

Serious Eye Damage/Irritation

Causes serious eye irritation.

Carcinogenicity

No data available.

Germ Cell Mutagenicity

No data available.

Reproductive Toxicity

No data available.

Respiratory/Skin Sensitization

May cause an allergic skin reaction. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Specific Target Organ Toxicity - Single Exposure

May cause drowsiness or dizziness.

May cause respiratory irritation.

Specific Target Organ Toxicity - Repeated Exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration Hazard

May be fatal if swallowed and enters airways.

Acute Toxicity

Inhalation: effects of overexposure include irritation of the respiratory tract, headache, dizziness, nausea, and loss of coordination.

0000064-17-5 ETHYL ALCOHOL

LC50 (mouse): Approximately 21000 ppm (4-hour exposure); cited as 39 g/m3 (4-hour exposure) (1, unconfirmed) LD50 (oral, rat): 7060 mg/kg (41); 10600 mg/kg (41); 13660 mg/kg (37) LD50 (oral, mouse): 3450 mg/kg (1, unconfirmed) LD50 (oral, guinea pig): 5560 mg/kg (37)

0000106-97-8 BUTANE

LC50 (mouse): 202000 ppm (481000 mg/m3) (4-hour exposure); cited as 680 mg/L (2-hour exposure (9) LC50 (rat): 276000 ppm (658000 mg/m3) (4-hour exposure); cited as 658 mg/L (4-hour exposure) (9)

SECTION 12) ECOLOGICAL INFORMATION

Toxicity

No data available.

Persistence and Degradability

No data available.

Bio-Accumulative Potential

No data available.

Mobility in Soil

No data available.

Other Adverse Effects

No data available.

SECTION 13) DISPOSAL CONSIDERATIONS

Waste Disposal

Under RCRA, it is the responsibility of the user of the product, to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state, and local laws.

Empty containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

SECTION 14) TRANSPORT INFORMATION

	IATA Information	IMDG Information	U.S. DOT Information
UN number:	UN1950	UN1950	UN1950
Proper shipping name:	Aerosols, flammable	Aerosols	Aerosols
Hazard class:	2.1	2.1	2.1
Packaging group:	N.A.	N.A.	N.A.
Hazardous substance (RQ):			No Data Available
Marine Pollutant:		No Data Available	No Data Available
Note / Special Provision:	LTD QTY	LTD QTY	LTD QTY
Toxic-Inhalation Hazard:			No Data Available

SECTION 15) REGULATORY INFORMATION

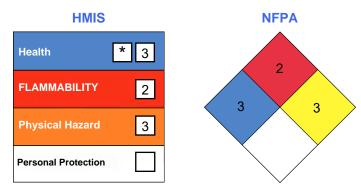
CAS	Chemical Name	% By Weight	Regulation List
0000064-17-5	ETHYL ALCOHOL	25% - 50%	SARA312,VOC,TSCA,ACGIH,OSHA
0000106-97-8	BUTANE	10% - 25%	SARA312,VOC,TSCA,ACGIH
0000074-98-6	PROPANE	1% - 5%	SARA312,VOC,TSCA,ACGIH,OSHA

SECTION 16) OTHER INFORMATION

Glossary

* There are points of differences between OSHA GHS and UN GHS. In 90% of the categories, they can be used interchangeably, but for the Skin Corrosion/Irritant Category and the Specific Target Organ Toxicity (Single and Repeated Exposure) Categories. In these cases, our system will say UN GHS.

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDG-Canadian Transportation of Dangerous Goods; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center (US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)-HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL-Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; NFPA- National Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self-Contained Breathing Apparatus; STEL- Short Term Exposure Limit; TCEQ- Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94-469; TWA- Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.



(*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks

Version 2.0:

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