

SAFETY DATA SHEET

Date of Preparation: May 29, 2020

NPN: 80101028

Section 1: IDENTIFICATION

Product Name: Hand Sanitizer
Synonyms: Not available.
Product Use: Hand Cleaner.
Restrictions on Use: Not available.
Manufacturer/Supplier: Eco Sanitizer
7664 Winston Street, Burnaby B.C. V5A 2H4
Phone Number: 1-604-339-0965
Emergency Phone: 1-604-339-0965
CANUTEC: 1-888-CAN-UTEC (226-8832), 613-996-6666
Date of Preparation of SDS: May 29, 2020

Section 2: HAZARD(S) IDENTIFICATION**GHS INFORMATION**

Classification: Flammable Liquids, Category 2
Eye Irritation, Category 2A
Specific Target Organ Toxicity (Single Exposure), Category 3 - Narcotic Effects

LABEL ELEMENTS Hazard Pictogram(s):

Signal Word: Danger
Hazard Highly flammable liquid and vapor Causes serious eye irritation. May cause
Statements: drowsiness or dizziness.
Precautionary Statements
Prevention: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Keep the 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.
Avoid breathing mist, vapours, or spray.
Wash thoroughly after handling.
Wear protective gloves, protective clothing and eye protection.

Response: IF ON SKIN (or hair): Take off immediately all contaminated clothing.
Rinse skin with water or shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.



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IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
Call a POISON CENTER or doctor if you feel unwell.
If eye irritation persists: Get medical attention.
In case of fire: Use dry chemical, CO2, water spray or alcohol-resistant foam to extinguish.

Storage: Store in a well-ventilated place. Keep the container tightly closed. Keep cool.

Disposal: Dispose of contents and container in accordance with applicable regional, national and local laws and regulations.

Hazards Not Otherwise Classified: Not applicable.

Ingredients with Unknown Toxicity: None.

This material is considered hazardous by the OSHA Hazard Communication Standard, (29 CFR 1910.1200). This material is considered hazardous by the Hazardous Products Regulations.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

| Hazardous Ingredient(s) | Common name / Synonyms | CAS No. | % vol./vol. |
|------------------------------------|-------------------------------|----------------|--------------------|
| Ethanol | Not available. | 64-17-5 | 80 |
| Hydrogen peroxide (H2O2) | Hydrogen peroxide | 7722-84-1 | 0.1 - 1 |
| Non-Hazardous Ingredient(s) | Common name / Synonyms | CAS No. | % vol./vol. |
| Water | Not available. | 7732-18-5 | 10 - 30 |
| 1,2,3-Propanetriol | Glycerin | 56-81-5 | 1 - 5 |

Actual concentration range(s) withheld as a trade secret.

Section 4: FIRST-AID MEASURES

Inhalation: If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell. If breathing or the heart stops, trained personnel should immediately begin artificial respiration (AR) or cardiopulmonary resuscitation (CPR) respectively. Get medical attention immediately.



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Acute and delayed symptoms and effects: May cause drowsiness or dizziness. May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Excessive inhalation may cause headache, dizziness, confusion, loss of appetite and/or loss of consciousness.

Eye Contact: If in eyes: Rinse cautiously with water for at least 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Acute and delayed symptoms and effects: Causes serious eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision. Ethanol may cause painful sensitization to light, chemical conjunctivitis and corneal damage.

Skin Contact: If used as recommended, no first-aid measures are necessary. If in contact with large amounts of product: Rinse skin with water or shower. Call a poison center or doctor if you feel unwell.

Acute and delayed symptoms and effects: No adverse effects are expected under normal conditions of use. Handling of large amounts may cause skin dryness and/or irritation.

Ingestion: If swallowed: Call a poison center or doctor if you feel unwell. If vomiting occurs naturally, have the victim lean forward to reduce the risk of aspiration. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If breathing or the heart stops, trained personnel should immediately begin artificial respiration (AR) or cardiopulmonary resuscitation (CPR) respectively. Get medical attention immediately.

Acute and delayed symptoms and effects: May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

General Advice: In case of accident or if you feel unwell, seek medical advice immediately (show label or SDS where possible).

Note to Physicians: Symptoms may not appear immediately.

Section 5: FIRE-FIGHTING MEASURES

FLAMMABILITY AND EXPLOSION INFORMATION

Highly flammable liquid and vapor. Will be easily ignited by heat, sparks or flames. Vapors may form explosive mixtures with air. Vapors may travel to the source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined



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areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors or in sewers. Runoff to sewer may create fire or explosion hazard. Containers may explode when heated. Liquid is lighter than water.

If a tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

Fire involving Tanks or Car/Trailer Loads: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of the tank. ALWAYS stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from the area and let fire burn.

Sensitivity to Mechanical Impact: This material is not sensitive to mechanical impact.

Sensitivity to Static Discharge: Take action to prevent static discharges. This material is sensitive to static discharge.

MEANS OF EXTINCTION Suitable Extinguishing Media:

Small Fire: Dry chemical, CO₂, water spray or alcohol-resistant foam.

Large Fire: Water spray, fog or alcohol-resistant foam. Move containers from the fire area if you can do it without risk.

Unsuitable Extinguishing Media:

Do not use straight streams. CAUTION: This product has a very low flash point: Use of water spray when fighting fire may be inefficient.

Products of Combustion: Oxides of carbon. Acrolein.

Protection of Firefighters: Inhalation or contact with material may irritate or burn skin and eyes. Fire may produce irritating, corrosive and/or toxic gases. Vapors may cause dizziness or suffocation. Runoff from fire control may cause pollution. Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.

Section 6: ACCIDENTAL RELEASE MEASURES

Emergency Procedures: As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in



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immediate area). All equipment used when handling the product must be grounded.

- Personal Precautions:** Do not touch or walk through spilled material. Use personal protection recommended in Section 8
- Environmental Precautions:** Prevent entry into waterways, sewers, basements or confined areas.
- Methods for Containment:** Stop leak if you can do it without risk. A vapor suppressing foam may be used to reduce vapors
- Methods for Clean-Up:** Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean non-sparking tools to collect absorbed material.
- Other Information:** See Section 13 for disposal considerations.

Section 7: HANDLING AND STORAGE

Handling: Do not swallow. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep the container tightly closed. Ground and bond container and receiving equipment. Use non-sparking tools. Take action to prevent static discharges. Avoid breathing mist, vapours, or spray. Wash thoroughly after handling. See Section 8 for information on Personal Protective Equipment.

Storage: Store in a well-ventilated place. Keep the container tightly closed. Keep cool. Store away from incompatible materials. See Section 10 for information on Incompatible Materials. Keep out of the reach of children.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component

Ethanol [CAS No.64-17-5]

ACGIH: 1000 ppm (TWA); A3 (2008)

OSHA: 1000 ppm (TWA), 1900 mg/m³ (TWA);

Hydrogen peroxide [CAS No.7722-84-1]

ACGIH: 1 ppm (TWA); A3 (1990)

OSHA: 1 ppm (TWA), 1.4 mg/m³ (TWA);

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Water [CAS No.7732-18-5]

ACGIH: No TLV established.

OSHA: No PEL established.

Glycerin [CAS No.56-81-5]

ACGIH: No TLV established.

OSHA: 15 mg/m³ (Total particulate) (TWA), 5 mg/m³ (Respirable fraction) (TWA); 10 mg/m³ (Total particulate) (TWA) [Vacated];

PEL: Permissible Exposure Limit

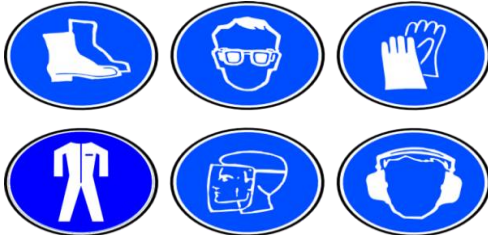
TLV: Threshold Limit Value

TWA: Time-Weighted Average

Engineering Controls:

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapour, gas, etc.) below recommended exposure limits. Use explosion-proof electrical, ventilating, and lighting equipment.

PERSONAL PROTECTIVE EQUIPMENT (PPE)



Eye/Face Protection:

Wear chemical safety goggles when handling large amounts of products. Ensure that eyewash stations are close to the workstation location. Use equipment for eye protection that meets the standards referenced by CSA Standard CAN/CSA-Z94.3-92 and OSHA regulations in 29 CFR 1910.133 for Personal Protective Equipment.

Hand Protection:

Wear protective gloves when handling large amounts of product. Consult manufacturer specifications for further information.

Skin and Body Protection:

Wear protective clothing when handling large amounts of product. Flame resistant clothing that meets the NFPA 2112 and CAN/CGSB 155.20 standards is recommended in areas where material is stored or handled.

Respiratory Protection:

Not necessary under normal conditions of use. If handling large amounts of product, if engineering controls and



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ventilation are not sufficient to control exposure to below the allowable limits then an appropriate NIOSH/MSHA approved air-purifying respirator that meets the requirements of CSA Standard CAN/CSA-Z94.4-11, with organic vapor cartridge, or self-contained breathing apparatus must be used.

Supplied air breathing apparatus must be used when oxygen concentrations are low or if airborne concentrations exceed the limits of the air-purifying respirators.

General Hygiene Considerations: Handle according to established industrial hygiene and safety practices. Consult a competent industrial hygienist to determine hazard potential and/or the PPE manufacturers to ensure adequate protection.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear liquid.

Colour: Colourless.

Odour: Alcohol.

Odour Threshold: Not available.

Physical State: Liquid.

pH: Not available.

Melting Point / Freezing Point: Not available

Initial Boiling Point: 78 °C (172.4 °F) (Ethanol)

Boiling Range: Not available.

Flash Point: 12 °C (53.6 °F) (Closed Cup - Ethanol)

Evaporation Rate: Not available.

Flammability (solid, gas): Not applicable.

Lower Flammability Limit: Not available.

Upper Flammability Limit: Not available.

Vapor Pressure: Not available.

Vapor Density: Not available.

Relative Density: Not available.

Solubilities: Miscible in water.



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Partition Coefficient: n- Octanol/Water: Not available

Auto-ignition Temperature: 400 °C (752°F)
(Ethanol)

Decomposition Temperature: Not available

Viscosity: Not available.

Percent Volatile, wt. %: Not available.

VOC content, wt. %: Not available.

Density: 0.8594 Kg/L at 20 °C

Coefficient of Water/Oil Distribution: Not available

Section 10: STABILITY AND REACTIVITY

Reactivity: Contact with incompatible materials. Sources of ignition. Exposure to heat.

Chemical Stability: Stable under normal storage conditions.

Possibility of Hazardous Reactions: None known.

Conditions to Avoid: Contact with incompatible materials. Sources of ignition. Exposure to heat.

Incompatible Materials: Acids. Strong oxidizers.

Hazardous Decomposition Products: Not available.

Section 11: TOXICOLOGICAL INFORMATION

EFFECTS OF ACUTE EXPOSURE

Product Toxicity

Oral: Not available.

Dermal: Not available.

Inhalation: Not available.

Component Toxicity

| Component | CAS No. | LD ₅₀ oral | LD ₅₀ dermal | LC ₅₀ |
|-------------------|-----------|-----------------------|-------------------------|----------------------------------|
| Ethanol | 64-17-5 | 7060 mg/kg (rat) | 20000 mg/kg (rabbit) | 20000 ppm (rat); 10H |
| Hydrogen peroxide | 7722-84-1 | 376 mg/kg (rat) | 4060 mg/kg (rat) | 2000 mg/m ³ (rat); 4H |



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| | | | | |
|----------|-----------|-------------------|------------------------|-------------------------|
| Water | 7732-18-5 | Not available. | Not available. | > 90000 µl/kg (rat); 4H |
| Glycerin | 56-81-5 | 12600 mg/kg (rat) | > 10000 mg/kg (rabbit) | > 570 mg/m3 (rat); 1H |

Likely Routes of Exposure: Eye contact. Skin contact. Inhalation. Ingestion. Skin absorption.
Target Organs: Skin. Eyes. Gastrointestinal tract. Respiratory system. Blood.
 Kidneys. Central nervous system.

Symptoms (including delayed and immediate effects)

Inhalation: May cause drowsiness or dizziness. May cause respiratory irritation.

Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Excessive inhalation may cause headache, dizziness, confusion, loss of appetite and/or loss of consciousness.

Eye: Causes serious eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision. Ethanol may cause painful sensitization to light, chemical conjunctivitis and corneal damage.

Skin: No adverse effects are expected under normal conditions of use. Handling of large amounts may cause skin dryness and/or irritation.

Ingestion: May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

Skin Sensitization: Not available.

Respiratory Sensitization: Not available.

Medical Conditions Aggravated By Exposure: Not available

EFFECTS OF CHRONIC EXPOSURE (from short and long-term exposure)

Target Organs: Skin. Eyes. Gastrointestinal tract. Respiratory system. Blood.
 Cardiovascular system. Liver. Kidneys. Reproductive system. Central nervous system.

Chronic Effects: Prolonged or repeated contact may dry skin and cause irritation. High vapour concentrations, generally greater than 10% by volume, may sensitize the heart and lead to lethal cardiac arrhythmias.

Carcinogenicity: Product is not classified as a carcinogen. See Component Carcinogenicity table below for information on individual components. Animal studies with Ethanol have reported the development of tumours.

Component Carcinogenicity

| Component | ACGIH | IARC | NTP | OSHA | Prop 65 |
|-----------|-------|---------|-------------|------------------|-------------|
| Ethanol | A3 | Group 1 | Not listed. | OSHA Carcinogen. | Not listed. |



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Hydrogen peroxide A3 Group 3 Not listed. Not listed.

Not listed.

Mutagenicity: Laboratory experiments with Ethanol have resulted in mutagenic effects.

Reproductive Effects: Ethanol may cause reproductive effects.

Developmental Effects Teratogenicity: Not available.

Embryotoxicity: Ethanol has been shown to produce fetotoxicity in the embryo or fetus of laboratory animals if swallowed. Prenatal exposure to ethanol by ingestion is associated with a distinct pattern of congenital malformations that have collectively been termed the "fetal alcohol syndrome".

Toxicologically Synergistic Materials: Not available.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: Not available.

Persistence / Degradability: Not available.

Bioaccumulation / Accumulation: Not available.

Mobility in Environment: Not available.

Other Adverse Effects: Not available.

Section 13: DISPOSAL CONSIDERATIONS

Disposal Instructions: Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

Section 14: TRANSPORT INFORMATION

U.S. Department of Transportation (DOT)

Proper Shipping Name: UN1170, ETHANOL, 3, PG II

Class: 3

UN Number: UN1170

Packing Group: II

Label Code:



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Canada Transportation of Dangerous Goods (TDG) Proper Shipping Name: UN1170, ETHANOL, 3, PG II

Class: 3

UN Number: UN1170

Packing Group: II

Label Code:



Section 15: REGULATORY INFORMATION

Chemical Inventories

US (TSCA)

The components of this product are in compliance with the chemical notification requirements of TSCA.

Canada (DSL)

The components of this product are in compliance with the chemical notification requirements of the NSN Regulations under CEPA, 1999.

Federal Regulations

United States

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SARA Title III

| Component | Section 302 (EHS) TPQ (lbs.) | Section 304 EHS RQ (lbs.) | CERCLA RQ (lbs.) | Section 313 | RCRA CODE | CAA 112(r) TQ (lbs.) |
|-------------------|------------------------------|---------------------------|------------------|-------------|-------------|------------------------|
| Hydrogen peroxide | 1000 | 1000 | Not listed. | Not listed. | Not listed. | Not listed. |

State Regulations

Massachusetts US Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

| Component | CAS No. | RTK List |
|-------------------|-----------|----------|
| Ethanol | 64-17-5 | Listed. |
| Hydrogen peroxide | 7722-84-1 | E |
| Glycerin | 56-81-5 | Listed. |



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Note: E = Extraordinarily Hazardous Substance

New Jersey US New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

| Component | CAS No. | RTK List |
|-------------------|----------------|-----------------|
| Ethanol | 64-17-5 | SHHS |
| Hydrogen peroxide | 7722-84-1 | SHHS |
| Glycerin | 56-81-5 | Listed. |

Note: SHHS = Special Health Hazard Substance

Pennsylvania US Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

| Component | CAS No. | RTK List |
|-------------------|----------------|-----------------|
| Ethanol | 64-17-5 | Listed. |
| Hydrogen peroxide | 7722-84-1 | E |
| Glycerin | 56-81-5 | Listed. |

Note: E = Environmental Hazard

California

California

Prop 65: This product does not contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm

Section 16: OTHER INFORMATION

Disclaimer: The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for their own particular use.

Date of Preparation of SDS: March 26, 2020

Version: 1.0

GHS SDS Prepared by: Deerfoot Consulting Inc.

Phone: (403) 720-3700