

MATERIAL SAFETY DATA SHEET

Date Issued: April 20, 2020

IN CASE OF A MEDICAL EMERGENCY, PLEASE CONTACT YOUR LOCAL POISON CONTROL

SECTION I Identification

Product identifier

Product Name 80% Ethyl Alcohol Hand Sanitizer

Other means of identification

UN/ID no UN1170

Other information

Greenerways 80% Ethyl Alcohol Hand Sanitizer, per the Food and Drug Administration (FDA) "Policy for Temporary Compounding of Certain Alcohol-Based Hand Sanitizer Products During the Public Health Emergency Immediately in Effect Guidance for Industry <https://www.fda.gov/media/136118/download> is made to these standards and formulation.

The hand sanitizer is compounded using only ingredients acceptable to the FDA's policy and the preparation of the product (percentage in final product formulation) is consistent with the World Health Organization (WHO) recommendations.

The compounder does not add other active or inactive ingredients. Different or additional ingredients may impact the quality and potency of the product. This SDS contains useful information for the safe handling and proper use of the product for industrial workplace conditions as well as unintended exposures as might occur with large spills.

Consumers should refer to the product label for appropriate consumer-specific information about this product when used according to the manufacturer's directions.

Recommended use of the chemical and restrictions on use

Recommended use Hand sanitizer, antiseptic rub

Restrictions on use No information available

Manufactured for: Emergency Telephone Number:
Greenerways LLC **800-777-1603**

Address:
688 Stony Hill Rd, Suite 143
Yardley, PA 19067

SECTION II Hazards Identification

Classification

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

Serious eye damage/eye irritation	Category 2A
Flammable liquids	Category 2

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Danger

Hazard statements

Highly flammable liquid and vapor

Causes serious eye irritation.



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

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

Use only non-sparking tools

Take precautionary measures against static discharge

Wear protective gloves/eye protection/face protection

Precautionary Statements – Response

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

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower

In case of fire: Use dry chemical, CO₂, water spray or alcohol-resistant foam to extinguish

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other information

May be harmful if inhaled. Causes mild skin irritation. May cause drowsiness or dizziness.

SECTION III Material Composition / Information on Ingredients

Substance/Mixture: Mixture

Hazardous ingredients

Chemical name	CAS No	Weight
Ethanol	64-17-5	80%
Water	7732-18	18.425%
Glycerin	56-81-5	1.45%
Hydrogen Peroxide	7722-84-1	0.125%

SECTION IV First Aid Measures

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance.

Inhalation Remove to fresh air.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Skin contact None under normal use conditions. If skin irritation occurs: Get medical advice/attention.

Ingestion Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.

Self-protection of the first aider Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Symptoms May cause redness and tearing of the eyes. Burning sensation. Prolonged contact may cause redness and irritation.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

SECTION V Fire and Explosion Hazard Data

Suitable Extinguishing Media Dry chemical. Carbon dioxide (CO₂). Water spray. Alcohol resistant foam.

Unsuitable extinguishing media None known based on information supplied.

Specific hazards arising from the Chemical Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge	Yes.
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION VI Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material.
Other information	Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containment	Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.
Methods for cleaning up	Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

SECTION VII Handling and Storage

Precautions for safe handling

Advice on safe handling	Use personal protection equipment. Avoid breathing vapors or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product.
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Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations.
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SECTION VIII Exposure Controls/ Personal Protection

Ingredient	CAS No	Value type (Form of exposure)	Control parameters/ Permissible Concentration	Basis
Ethanol	64-17-5	TWA	1,000 ppm 1,900 mg/m3	NIOSH REL
		TWA	1,000 ppm 1,900mg/m3	OSHA Z-1
		STEL	1,000 ppm	ACGIH

Appropriate engineering controls

Engineering controls

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection

Tight sealing safety goggles.

Hand protection

Wear suitable gloves.

Skin and body protection

Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots.

Respiratory protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations

Do not eat, drink or smoke when using this product. Contaminated workclothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

SECTION IX Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance

Physical state	Liquid
Color	Colorless
Odor	Alcohol
Odor threshold	No data available

pH :	6.0 -7.5
Melting point/freezing point :	No data available
Initial boiling point and boiling range:	70 °C
Flash point :	25 °C
Evaporation rate :	No data available
Flammability (solid, gas) :	Not applicable
Upper explosion limit :	No data available

Lower explosion limit :	No data available
Vapor pressure :	No data available
Relative vapor density :	No data available
Density :	0.8750 g/cm ³
Solubility(ies)	
Water solubility :	soluble
Partition coefficient:	No data available
Autoignition temperature :	No data available
Decomposition temperature :	The substance or mixture is not classified self-reactive.
Viscosity	
Viscosity, kinematic :	No data available
Explosive properties :	Not explosive
Oxidizing properties :	The substance or mixture is not classified as oxidizing.

SECTION X Stability and Reactivity

Reactivity	None under normal use conditions.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	None known based on information supplied.
Hazardous decomposition products	None known based on information supplied.

SECTION XI Toxicological Information

Information on likely routes of exposure

Product Information

Inhalation

Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract. May be harmful if inhaled. May cause drowsiness or dizziness.

Eye contact

Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.

Skin contact

Specific test data for the substance or mixture is not available. Causes mild skin irritation. Prolonged contact may cause redness and irritation.

Ingestion

Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms May cause redness and tearing of the eyes. Prolonged contact may cause redness and irritation.

Acute toxicity

Numerical measures of toxicity

Ingredients:

Ethanol: 64-17-5
 Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
 Acute inhalation toxicity : LC50 (Rat): 124.7 mg/l
 Exposure time: 4 h
 Test atmosphere: vapor

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

Skin corrosion/irritation	Classification based on data available for ingredients. May cause skin irritation.
Serious eye damage/eye irritation	Classification based on data available for ingredients. Causes serious eye irritation.
Respiratory or skin 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. Based on available data, the classification criteria are not met.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
64-17-5	A3	Group 1	Known	x

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

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.

Target organ effects Eyes, Skin, Respiratory system.

Aspiration hazard No information available.

Other adverse effects No information available.

Interactive effects No information available.

SECTION XII Ecological Information

Ecotoxicity The environmental impact of this product has not been fully investigated.

Ingredients:

Ethanol:

Toxicity to fish

: LC50 (Pimephales promelas (fathead minnow)); > 1,000 mg/l Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates

: EC50 (Daphnia magna (Water flea)); > 1,000 mg/l Exposure time: 48 h

Toxicity to algae

: EC50 (Chlorella vulgaris (Fresh water algae)): 275 mg/l Exposure time: 72 h
Method: OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)

: NOEC (Daphnia magna (Water flea)): 9.6 mg/l
Exposure time: 9 d

Toxicity to bacteria

: EC50 (Photobacterium phosphoreum): 32.1 mg/l
Exposure time: 0.25 h

Persistence and degradability No information available.

Bioaccumulation There is no data for this product.

Component Information

Chemical Name	Partition coefficient
Ethanol 64-17-5	-0.32

Other adverse effects No information available.

SECTION XIII Disposal Considerations

Waste treatment methods**Waste from residues/unused products**

Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

California Hazardous Waste Status This product contains one or more substances that are listed with the State of California as a hazardous waste.

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

SECTION XIV Transport Information

Note:

This is a consumer product and as such may usually be shipped as ORM-D (other regulated materials for domestic transport only) Consumer Commodity for transport within the United States. While this product is a hazardous material, it may be shipped in a limited quantity that presents a limited hazard during transportation, due to its form, quantity, and packaging. The information listed below is for shipping bulk material.

International Regulation**UNRTDG**

UN number : UN 1987
Proper shipping name : ALCOHOLS, N.O.S.
(Ethanol, Propan-2-ol)
Class 3
Packing group III
Labels 3

IATA-DGR

UN/ID No. : UN 1987
Proper shipping name : Alcohols, n.o.s.
(Ethanol, Propan-2-ol)
Class 3
Packing group III
Labels : Flammable Liquids
Packing instruction
(cargo aircraft) 366
Packing instruction
(passenger aircraft) 355

IMDG-Code

UN number : UN 1987
Proper shipping name : ALCOHOLS, N.O.S.
(Ethanol, Propan-2-ol)
Class 3
Packing group III
Labels 3
EmS Code : F-E, S-D
Marine pollutant : no

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

Not applicable for product as supplied.

Domestic regulation**49 CFR**

UN/ID/NA number : UN 1987
Proper shipping name : ALCOHOLS, N.O.S.
Class 3
Packing group III
Labels : FLAMMABLE LIQUID
ERG Code 127

SECTION XV Regulatory Information

International Inventories**TSCA**

Chemical name	CAS No	US TSCA Inventory listing	US TSCA active/inactive designation
Ethanol	64-17-5	Present	Active

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

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

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

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 40CFR 122.42).

US State Regulations

California Proposition 65

Ethyl alcohol is only a considered a Proposition 65 developmental hazard when it is ingested as an alcoholic beverage. This product contains the following Proposition 65 chemicals:

Chemical name	California Proposition 65
Ethanol 64-17-5	Carcinogen Developmental

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Ethanol 64-17-5	x	x	x

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

SECTION XVI Other Information

NFPA	Health hazards 2	Flammability 3 Instability 0	Physical and chemical properties -
HMIS	Health hazards 2	Flammability 3 Physical hazards 0	Personal protection X

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling Maximum limit value		*	Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 EPA (Environmental Protection Agency)
 Acute Exposure Guideline Level(s) (AEGL(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 Japan GHS Classification
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program
 Organization for Economic Co-operation and Development Screening Information Data Set
 World Health Organization

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Revision Note	Version 2

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 information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet



Mfg. Date: 03/29/2020

Exp. Date: 03/01/2022

HAND SANITIZER SPRAY
Certificate of Analysis

Test Method	Specification	Result
Appearance (TMHS0001)	Clear Liquid	Pass
Color (TMHS0002)	Uncolored	Pass
Odor (TMHS0003)	Medicinal (alcohol)	Pass
PH (TMHS0004)	5-7	6.8
Specific Gravity @ 25 (TMHS0005)	0.85 - 0.95	0.85
Viscosity (TMHS0006) RVT 5/10 rpm	n/a	n/a
Ethyl Alcohol	80% - 85%	81.21%
TPC (Outside Lab)	<100 cfu/gm	<10 cfu/gm
Yeast/Mold (Outside Lab)	<10 cfu/gm	<10 cfu/gm



April 23, 2020

Re. Hand Sanitizers (80%).

To whom it may concern:

Greenerways 80% Ethyl Alcohol Hand Sanitizer, per the Food and Drug Administration (FDA) "Policy for Temporary Compounding of Certain Alcohol-Based Hand Sanitizer Products During the Public Health Emergency Immediately in Effect Guidance for Industry <https://www.fda.gov/media/136118/download> is made to these standards and formulation.

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The compounder does not add other active or inactive ingredients. Different or additional ingredients may impact the quality and potency of the product.

Consumers should refer to the product label for appropriate consumer-specific information about this product when used according to the manufacturer's directions.

Healthfully,

Jayme Bella
CEO