Safety Data Sheet

Part I: What is the material and what do I need to know in an Emergency?

Section 1 IDENTIFICATION	
Product Name: **ReadiHands Hand Sanitizer**	
Manufacturer's Name: **St. Gabriel Organics**	Emergency Telephone Number: **800 801 0061 Toll Free**
Address: **14044 Litchfield Drive** **Orange, VA 22960**	Telephone Number for Information: **540 672 0866**

Section 2 Hazard(s) Identification

EMERGENCY OVERVIEW:

Appearance: colorless clear liquid.

Warning! Causes severe eye irritation. Flammable liquid and vapor. Causes respiratory tract irritation. This substance has caused adverse reproductive and fetal effects in humans. May cause central nervous system depression. May cause liver, kidney and heart damage. Causes moderate skin irritation.

Target Organs: Kidneys, heart, central nervous system, liver.

Classification of the substance or mixture: Flam. Liq. 2 H225: Flammable liquid and vapor (flashpoint < 23 °C; initial boiling point > 35 °C)

FLAMMABLE

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation.

Eye Contact: Causes severe eye irritation. May cause painful sensitization to light. May cause chemical conjunctivitis and corneal damage. DO NOT PUT IN EYES

Skin Contact: May cause moderate skin irritation.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause systemic toxicity with acidosis. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure.

Chronic: May cause reproductive and fetal effects. Laboratory experiments have resulted in mutagenic effects. Animal studies have reported the development of tumors. Prolonged exposure may cause liver, kidney, and heart damage.

Antidote: Replace fluid and electrolytes.

Section 3 Composition/Information in Ingredients:

Hazardous Ingredients:	**EINECS#/ELINCS#**	**CAS NO.**	**%W/W**	**OSHA PEL/TWA:**	**ACGIH TLV/TWA**	**NIOSH REL/TWA**
Ethanol **Synonyms:** Ethyl alcohol; Ethyl hydroxide; Fermentation alcohol; Grain alcohol; Methylcarbinol	200-578-6	64-17-5	72-79	1000 ppm TWA; 1900 mg/m^3 TWA	1000 ppm TWA	1000 ppm TWA; 1900 mg/m3 TWA

Part II: What should I do if a hazardous situation occurs?

Section 4 First Aid Measures

Seek Medical Attention as Soon as Possible

Eye Contact: Flush with copious amounts of cool water for 15 minutes. If irritation or discomfort persists, get medical aid.

Skin Contact: Immediately wash skin with soap and water. Remove all contaminated clothing. Wash clothing before reuse.

Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation.

Note to Physicians: Treat symptomatically and supportively. Persons with skin or eye disorders or liver, kidney, chronic respiratory diseases, or central and peripheral nervous sytem diseases may be at increased risk from exposure to this substance.

Antidote: Replace fluid and electrolytes.

Section 5 Fire Fighting Measures

Flash Point: ≈ 16 °C (61 °F)	Boiling Point: ≈ 78.2 °C (173 °F)	LEL: 4.1%	UEL: 23.75%
Extinguishing Media: Alcohol Foam, carbon dioxide, or water spray when fire involves this material.		Unusual Fire/Explosion Hazards: NA	

Specific Hazard(s): Flammable Liquid. Emits toxic fumes (carbon oxides) under fire conditions. Vapors can travel to a source of ignition and flash back. Containers may explode in a fire. Cool containers from a distance using water spray. SENSITIVE TO STATIC DISCHARGE. (See also Stability and Reactivity section).

Protective Equipment: Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots. Material can react violently with water (spattering and misting) and react with metals to produce flammable hydrogen gas.

Hazardous Decomposition Products: Emits toxic fumes (carbon oxides) under fire conditions.

Section 6 Accidental Release Measures

Personal Precautions: Use PPE listed in Section 8.

Patient/Victim: Wash contacted areas with soap and water. Work clothes should be laundered separately. Launder contaminated clothing before re-use.

In case of spill: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. A vapor suppressing foam may be used to reduce vapors.

Waste Disposal Method: Do not pour down drain. Take up liquid spill into a non combustible material e.g.: sand, earth, vermiculite or kieselguhr, powdered limestone. Scoop absorbed substance into closing containers. See Section 7 for suitable container materials. Carefully collect the spill/leftovers. Do not use compressed air for pumping over spills. Clean contaminated surfaces with an excess of water. Dispose of collected spill at an approved landfill. Wash clothing and equipment after handling.

Part III: How can I prevent hazardous situations from occurring?

Section 7 Handling and Storage

Work/Hygienic Practices: Wash thoroughly after handling. Use only in a well-ventilated area. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Appropriate PPE should be used. Keep material away from drains.

Handling and Storage: Use techniques that minimize spilling. Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area. Do not store near perchlorates, peroxides, chromic acid or nitric acid. Do not store above 30° C (86° F).

Suitable container materials: Unplated steel, nickel-plated steel, stainless steel, black iron and bronze have shown resistance to ethanol corrosion. Nonmetallic materials like reinforced fiberglass, Buna-N, Neoprene rubber, polypropylene, nitrile rubber, Viton and Teflon must meet acceptable usage standards with E85.

Section 8 Exposure Controls and Personal Protection

Ventilation and Engineering Controls: Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits. See PELs in Section 3.

Respirator Protection: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Eye Protection: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Hand Protection: Wear appropriate protective gloves to prevent skin exposure.

Other Protective Clothing or Equipment: Appropriate footwear and clothing to prevent skin exposure.

Section 9 Physical and Chemical Properties

Vapor Density: ≈ 1.59	Sp Gravity: 0.835 @ 20 °C	Odor Threshold: NE	Solubility in water: soluble		pH: 7
Vapor Pressure: ≈ 59.3 mm Hg @ 20 °C		Coefficient of Oil/Water Distibution (Partition Coefficient): NA			
Melting Point: ND	Boiling Point: ≈ 78.2 °C (173 °F)	Evaporation Rate: NA		Appearance: clear liquid	
How to Detect this Substance: Mild, rather pleasant odor like wine or whiskey.					

Section 10 Stability and Reactivity

Shelf life: Data Not Available.

Conditions to avoid: Naked flames and smoking should not be permitted in storage areas. Do not store above 30°C (86°F). It is recommended that fork lift trucks and electrical equipment are protected to the appropriate standard. Incompatible with strong oxidizing agents.

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition Products: High temperatures and fires may produce such toxic substances as carbon monoxide and carbon dioxide.

Part IV: Is there any other useful information about this material?

Section 11 Toxicological Information

Most Likely routes of exposure: Ingestion, Inhalation, Skin and Eye Contact

Exposure to ethanol vapor concentrations in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Ethanol may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.

Component: Acute Toxicity	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ethanol (CAS No. 64-17-5)	7,060 mg/kg. Rat	20,000 mg/kg. Rabbit	124.7 mg/kg. Rat

Chronic Toxicity: Chronic exposure to ethanol can cause damage to liver, kidney, and heart.

Mutagenic Effects: Repeated and prolonged exposure to ethanol may cause mutagenic effects.

Reproductive Effects: Ingestion of ethanol during pregnancy has been shown to cause birth defects and other reproductive harm.

Target Organ(s) or System(s): Central Nervous System, Liver

IARC / NTP / OSHA: This product contains no ingredients at 0.1% or greater that is listed as a human carcinogen.

Section 12 Ecological Information

Component	Species	Exposure Conditions	Duration	Results
Ethanol (CAS No. 64-17-5)	Rainbow trout	Flow-through @ 24-24.3 °C	96 hours	LC50

Environmental Stability (Persistence, degradability, bioaccumulative potential, Mobility in soil): No ecological data available.

Results of PBT and vPvB assessment: No data available.

Other Adverse Effects: No data available.

Section 13 Disposal Considerations

Do not reuse empty container. Dispose of empty container in accordance with applicable regulations or as advised by your local hazardous regulatory authority. Do not pour leftover material down drain. Take up leftover liquid into a non combustible material e.g.: sand, earth, vermiculite or kieselguhr, powdered limestone in a closeable containers. See Section 7 for suitable container materials.Triple rinse containers or clean contaminated surfaces with an excess of water. Dispose of leftover materials at an approved landfill.

Section 14 Transportation Information

	UN Number	UN Proper Shipping Name	Transport Hazard Class	Packing Group
DOT	UN1170	Ethyl Alcohol	3	II
TDG	UN1170	ETHYL ALCOHOL more than 24 percent by volume	3	II
IMO/IMDG	UN1170	ETHANOL (ETHYL ALCOHOL)	3	II
IATA/ICAO	UN1170	Ethyl Alcohol	3	II

Marine Pollutant: No (per 49 CFR 172.101 appendix B)	Bulk Transport according to Annex II of MARPOL 73/78 and the IBC Code	
Harmonized System (HS) code: NA	Harmonized Tariff System (HTS) code: NA	Schedule B Number: NA

Section 15 Regulatory Information

U.S. Superfund Amendments and Reauthorization Act (SARA) Codes: CAS No. 64-17-5: Acute/Immediate, Chronic/Delayed, Fire
SARA Section 302 Extremely Hazardous Substances: None of the Chemicals in this product have a TPQ
CERCLA Hazardous Substances and corresponding RQs: None of the Chemicals in this product have an RQ
Section 313: None of the Chemicals in this product are reprtable under section 313
US TSCA Inventory Status: YES. A component of this product (Ethanol - CAS No. 64-17-5) is listed on the TSCA Inventory.
TSCA Section 12b: None of the Chemicals in this product are listed under TSCA Section 12b
TSCA Significant New Use Rule: None of the Chemicals in this product have a SNUR under TSCA
Health & Safety Reporting List: None of the Chemicals in this product are on the Health & Safety Reporting List
Chemical Test Rules: None of the Chemicals in this product are under a Chemical Test Rule
OSHA: None of the Chemicals in this product are considered highly hazardous by OSHA
Clean Air Act: This material does not contain any hazardous air polutants, Class 1 ozone depleters, or Class 2 Ozone depleters.
Clean Water Act: None of the Chemicals in this product are listed under the CWA as being Hazardous Substances, Priority Pollutants, or Toxic Pollutants.
State Right To Know: YES. CA, MA, MN, NJ, PA (The primary component of this product is Ethanol - CAS No. 64-17-5)
California Proposition 65: This product contains ethanol, a chemical known by the State of California to cause developmental toxicity when in alcoholic beverages.
WHMIS: Regulated - Contains Ethanol
EU CLP (1272/2008): Regulated - Contains Ethanol
Mexico: Regulated - Contains Ethanol UN1170

National Fire Protection Association (NFPA)		Homeless Management Information Systems (HMIS)		Personal Protective Equipment (PPE)
Health:	2	Health:	2	Gloves and Saftey Glasses must be worn.
Flammability:	3	Flammability:	3	
Reactivity:	0	Physical Hazard:	0	
Specific Hazard:	None	PPE:	B	

Section 16 Other Information

This SDS is provided for informational purposes only based upon the present state of our knowledge. Recipients of this material must take responsibility for observing existing laws and regulations.

Waiver: The above information is believed to be correct, but does not purport to be all inclusive. This data should be used only as a guide in handling this material. ReadiHands/St. Gabriel Organics accepts no responsibility for the accuracy, sufficiency, or reliability of information contained here, and shall not be held liable for any loss, damage, injury, or expense resulting from use, handling, or from direct contact with this product.

Last Revised: April 23, 2020