SAFETY DATA SHEET

Prepared to US-OSHA Standards

ZOGICS INSTANT HAND SANITIZER SDS Revision: 1.0 SDS Revision Date: 20May20

1. PRODUCT AND COMPANY IDENTIFICATION

1.1	**Product Name:**	**ZOGICS INSTANT HAND SANITIZER**
1.2	**Product Code:**	12099-FF
1.3	**Product Uses &**	OTC Antimicrobial Hand Sanitizer for consumer and occupational use.
1.4	**Supplier Name:**	ZOGICS
1.5	**Supplier Address:**	309 Pittsfield Road, Lenox, MA. 01240
1.6	**Business Phone:**	1-888-623-0088
1.7	**Business Email:**	www.zogics.com
1.8	**Emergency Phone:**	**INFOTRAC: 1-800-535-5053 (North America) +1-352-323-3500 (Outside North America)**

This document is written for the packaged product and contains information for an occupational, or workplace, setting.

2. HAZARDS IDENTIFICATION

2.1	**Classification of the Substance or Mixture:**	**Physical Hazards:** Flammable Liquid - Category 3 **Health Hazards:** Serious Eye Irritation - Category 2A **Environmental Hazards:** Not Classified	
2.2	**Labeling Elements:**	**Hazard Signal Word**: Warning **Hazard Statements:** Flammable Liquid and Vapour. Causes serious eye irritation. **Precautionary Statements:** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Store in well ventilated place. Keep cool. 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 medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use. Dispose of waste and residue in accordance with local authority requirements.	**Hazard Pictograms:** 
2.3	**Other Hazards:**	None known.	

3. COMPOSITION / INFORMATION ON INGREDIENTS

Mixture:

CHEMICAL NAME	CAS No.	GHS Hazard Classification	% by Weight
Ethanol	64-17-5	Flammable Liquid, Category 2 Serious Eye Irritant, Category 2A	60 - 65

There are no other ingredients present in the mixture which, within the current knowledge of the supplier and in the concentrations applicable, are classified as physical, health or environmental hazards, or have been assigned a workplace exposure limit, and hence require reporting in this section.

4. FIRST AID MEASURES

4.1	**Description of First Aid Measures:**	Ingestion: In case of ingestion, do not induce vomiting without medical advice. Give victim several glasses of water to drink. Never give anything by mouth to an unconscious person. Seek medical attention if necessary. Eyes: In case of 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. Skin: If signs of irritation to the skin develop, wash the affected area with plenty of water and soap. Seek medical attention in the event of an adverse reaction or if symptoms persist. Inhalation: If respiratory distress or irritation occurs, remove victim to fresh air. Seek medical attention in the event of an adverse reaction or if symptoms persist.
4.2	**Most Important Symptoms and Effects, Both Acute and Delayed:**	Direct contact with eyes may cause serious eye irritation. Symptoms may include stinging, tearing, and redness.
4.3	**Indication of Immediate Medical Attention and Special Treatment Needed:**	Provide general supportive measures and treat symptomatically. No known specific antidotes.

5. FIRE FIGHTING MEASURES

5.1	**Extinguishing Media:**	Suitable Extinguishing Media: Water mist, dry chemical, alcohol resistant foam, or carbon dioxide. Unsuitable Extinguishing Media: None known.
5.2	**Specific Hazards:**	Warning! Flammable liquid and vapor. When heated above the flash point, vapours may burn or form explosive mixture with air. May produce oxides of carbon and/or nitrogen on combustion.
5.3	**Special Protective Equipment and Precautions for Firefighters:**	Wear self-contained breathing apparatus and full personal protective gear. Use standard firefighting procedures.

6. ACCIDENTAL RELEASE MEASURES

6.1	**Personal Precautions, Protective Equipment and Emergency Procedures:**	Observe all personal protection equipment recommendations described in Section 8. Remove all sources of ignition and ensure adequate ventilation. Ventilate closed spaces before entering them. Keep unnecessary personnel away.
6.2	**Environmental Precautions:**	Dike or contain spill to prevent from entering drains. Avoid direct release to drains, surface and ground water.
6.3	**Methods and Material for Containment and Cleaning Up:**	Clean up spill with non-combustible absorbent material. Clean area to prevent a slip hazard. Dispose of all washings, sweepings, and absorbents in accordance with federal, state and local regulations. Use non-sparking tools and equipment. Take action to prevent static discharges.

7. HANDLING AND STORAGE

7.1	**Precautions for Safe Handling:**	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Utilize safe handling and transportation techniques to avoid spillage or rupture of the product. Ensure adequate ventilation in the workplace. Avoid direct eye contact. Do not eat, drink, or smoke while handling. Wear appropriate personal protective equipment (see Section 8). Routinely wash work clothing and protective equipment. Observe good hygiene practices.
7.2	**Conditions for Safe Storage:**	Store in a cool, dry, and well-ventilated area away from direct sun-light and incompatible materials (see Section 10). Do not store near heat, sparks, open flames and other ignition sources. Store at temperatures 4 to 40^{o}C (39 to 104^{o}F).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control Parameters:

CHEMICAL NAME	CAS Number	Occupational Exposure Limits		
		OSHA PEL (TWA)	NIOSH REL (TWA)	ACGIH TLV (STEL)
Ethanol	64-17-5	1000 ppm 1900 mg/m^3	1000 ppm 1900 mg/m^3	1000 ppm

8.2	**Engineering Controls:**	Provide adequate ventilation in the workplace to maintain airborne levels below recommended exposure limits.
8.3	**Respiratory Protection:**	NIOSHA approved respirator in accordance with 29 CFR 1910.134 if airborne exposure limits are exceeded.
8.4	**Eye Protection:**	Avoid eye contact. Wear protective eyewear (e.g., safety glasses with side-shield) if eye contact hazards exist in the workplace.
8.5	**Skin Protection:**	No special skin protection is required under typical circumstances of use and handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1	**Appearance:**	Clear, colorless fluid gel
9.2	**Odor:**	Alcohol
9.3	**Odor Threshold:**	No data available on this product
9.4	**pH:**	6.0 - 7.5
9.5	**Melting Point:**	No data available on this product
9.6	**Freezing Point:**	No data available on this product
9.7	**Initial Boiling Point/Boiling Range:**	No data available on this product
9.8	**Flashpoint:**	27^{o}C (80.6^{o}F) - Closed Cup
9.9	**Evaporation Rate:**	No data available on this product
9.10	**Flammability (solid, gas):**	No data available on this product
9.11	**Upper/Lower Flammability or Explosive Limits:**	UEL: 19.0% (ethanol) LEL: 3.3% (ethanol)
9.12	**Vapor Pressure:**	No data available on this product

9.13	**Vapor Density:**	No data available on this product
9.14	**Relative Density (water=1.0):**	0.810 - 0.870
9.15	**Solubility:**	Soluble in water
9.16	**Partition Coefficient (n-octanol/water):**	No data available on this product
9.17	**Autoignition Temperature:**	No data available on this product
9.18	**Decomposition Temperature:**	No data available on this product
9.19	**Viscosity:**	No data available on this product
9.20	**Other Information:**	No relevant additional information available on this product

10. STABILITY AND REACTIVITY

10.1	**Reactivity:**	The product is not reactive under normal conditions of use, storage and transport.
10.2	**Chemical Stability:**	This product is stable under normal handling and storage conditions.
10.3	**Possibility of Hazardous Reactions:**	No hazardous reactions known under conditions of normal use. Hazardous polymerization is not expected.
10.4	**Conditions to Avoid:**	Direct sunlight, extremely high or low temperatures, sparks, open flame, and other ignition sources.
10.5	**Incompatible Materials:**	Strong acids, bases, and oxidizing agents.
10.6	**Hazardous Decomposition Products:**	No hazardous decomposition products are known. May produce oxides of carbon and/or nitrogen on combustion.

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects: Health effects of the mixture are derived from product data, ingredient information of concentrations present, and in accordance with US OSHA Regulation 29 CFR 1910.1200. Classifications for the mixture may be based on additional component data not shown.

11.1	**Potential Acute Health Effects and Symptoms:**	
	Eye Contact:	Direct contact with eyes may cause serious eye irritation. Symptoms may include stinging, tearing, and redness.
	Skin Contact:	No adverse effects expected from normal use. Prolonged and repeated skin exposure may cause defatting, drying and cracking of the skin.
	Ingestion:	No adverse effects expected from normal use. May cause gastrointestinal discomfort/irritation if swallowed. Ingestion of high concentrations may cause nausea, vomiting, and signs of central nervous system depression (headache, dizziness and drowsiness).
	Inhalation:	No adverse effects expected from normal use. Excessive inhalation may cause nausea, vomiting, and signs of central nervous system depression (headache, dizziness, and drowsiness).
11.2	**Potential Chronic Health Effects:** None known	
11.3	**Acute Toxicity:**	**Product Summary/Conclusion:** Classification criteria are not met.
	Product:	Acute Toxicity Estimate: Calculation Method Oral: > 11,000 mg/kg Dermal: > 33,000 mg/kg
	Components:	**Ethanol:** CAS 64-17-5 Oral LD50: 7060 mg/kg (Rat) Dermal LD50: 20,000 mg/kg (Rabbit)

11.4	**Skin Corrosion/ Irritation:**	**Product Summary/Conclusion:** Classification criteria are not met.
		Product: Human Repeat Insult Patch Test - No evidence of skin irritation.
		Ethanol: CAS 64-17-5 Acute Dermal Irritation/Corrosion, OECD 404, Rabbit: Not irritating to skin Modified Draize 1944 for Human Repeat Occluded (95% active): Slightly irritating under extreme repeat dose situations.
11.5	**Serious Eye Damage/Irritation:**	**Product Summary/Conclusion:** Causes serious eye irritation.
		Ethanol: CAS 64-17-5 Acute Eye Irritation/Corrosion, OECD 405, Rabbit (100% active): GHS Category 2A eye irritant.
11.6	**Respiratory or Skin Sensitization:**	**Product Summary/Conclusion:** Classification criteria are not met.
		Product: Human Repeat Insult Patch Test - No evidence of skin sensitization.
		Ethanol: CAS 64-17-5 Respiratory Sensitization: No reports of human respiratory sensitization. Skin Sensitization: No skin sensitization evident in animal studies at 75% concentration.
11.7	**Germ Cell Mutagenicity:**	**Product Summary/Conclusion:** Classification criteria are not met. No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
		Ethanol: CAS 64-17-5 *In-vitro* : Negative for bacterial reverse mutation test (OECD 471) in Salomella typhimurium up to maximum plate concentration of 10 mg/plate, with and without metabolic activation.
11.8	**Carcinogenicity:**	No components at levels greater than or equal to 0.1% are listed as carcinogens by IARC, US OSHA or NTP.
11.9	**Reproductive Toxicity:**	**Product Summary/Conclusion:** Classification criteria are not met. No data available to indicate product or any components present at greater than 0.1% cause reproductive or developmental effects.
		Ethanol: CAS 64-17-5 Two-Generation Reproduction Toxicity, OECD 416, Mouse, Oral: NOAEL 15% (20.7g/kg/day) (highest concentration tested) Prenatal Developmental Toxicity, OECD 414, Rat, Inhalation: NOAEL (maternal toxicity) 16,000 ppm, NOAEL (teratogenicity) > 20,000 ppm (highest concentration tested)
11.10	**STOT-Single Exposure:**	Not classified due to lack of data.
11.11	**STOT-Repeated Exposure:**	**Product Summary/Conclusion:** Classification criteria are not met.
		Ethanol: CAS 64-17-5 90-Day Oral Toxicity, Mouse: NOAEL > 9400 mg/kg (total dose), LOAEL 9700 mg/kg Repeated Dose Inhalation Toxicity, Rat, 4 weeks (6 hours/day, 5 days/week): NOAEC > 6130 ppm
11.12	**Aspiration Hazard:**	Not classified due to lack of data.

12. ECOLOGICAL INFORMATION

12.1	**Ecotoxicity:**	**Product Summary/Conclusion:** Classification criteria are not met.
		Ethanol: CAS 64-17-5 Aquatic Plants EC50: 275 mg/L, 72 hours (Chlorella vulgaris: fresh water algae) Crustacea LC50: 12,340 mg/L, 48 hours (Daphnia magna); EC50: 23,874 mg/L, 24 hours (Artemia salina) Fish LC50: > 10,000 mg/L, 96 hours (rainbow trout); > 13,400 mg/L, 96 hours (fathead minnow)
12.2	**Persistence and Degradability:**	**Ethanol:** CAS 64-17-5 Readily biodegradable
12.3	**Bioaccumulative Potential:**	Ethanol (CAS 64-17-5): -0.31 (log Kow)
12.4	**Mobility in Soil:**	No data available
12.5	**Other Adverse Effects:**	No other known adverse environmental effects or critical hazards.

13. DISPOSAL CONSIDERATIONS

13.1	**Waste Disposal Methods:**	Dispose of in accordance with appropriate federal, state, and local regulations. Avoid direct release of large quantities to sewage drains. Empty containers should be taken to an approved waste handling site for recycling or disposal.
13.2	**Special Precautions:**	Observe all precautions for ignitable waste.
13.3	**US EPA (RCRA) Hazardous Waste Classification:**	U.S. EPA Waste Number: RCRA D001/Unlisted Ignitable Hazardous Waste.

14. TRANSPORT INFORMATION		
14.1	**US DOT (GROUND):**	Consumer Commodity, Limited Quantity
14.2	**IATA (AIR):**	Consumer Commodity, ID 8000, Class 9
14.3	**IMDG (OCEAN):**	UN 1170, Ethanol Solutions, Class 3, Packing Group III, Limited Quantity
14.6	**Environmental Hazards:**	Not regulated
14.7	**Transport in Bulk According to Annex II of Marpol and the IBC Code:**	Not applicable
14.8	**Special Precautions for User:**	Transport within user's premises: Transport in closed containers that are upright and secure. Read SDS and emergency procedures before handling.
15. REGULATORY INFORMATION		
15.1	**SARA 302 TPQ:**	No chemical components in this product are listed.
15.2	**SARA 304 RQ:**	No chemical components in this product are listed.
15.3	**SARA 311/312:**	Not applicable - product is exempt.
15.4	**SARA 313:**	No chemical components in this product are listed.
15.5	**CERCLA RQ:**	RCRA D001/Unlisted Ignitable Hazardous Waste, Ethanol = 100 lbs
15.6	**Clean Air Act (CAA) Section 112(r) TQ:**	No chemical components in this product are listed.
15.7	**Clean Water Act (CWA):**	No chemical components in this product are listed.
15.8	**California Proposition 65:**	This product is not subject to California warning labeling for carcinogens or reproductive toxins.
16. OTHER INFORMATION		
16.1	**Legend:**	ACGIH: American Conference of Governmental Industrial Hygienists
		CAS: Chemical Abstracts Service
		CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act
		CFR: Code of Federal Regulations
		DOT: (US) Department of Transportation
		EC50: Effective Concentration, 50%
		EPA: (US) Environmental Protection Agency
		GHS: Globally Harmonized System of Classification and Labeling Chemicals
		IATA: International Air Transport Association
		IARC: International Agency for the Research of Cancer
		IBC: Intermediate Bulk Container
		IMDG: International Maritime Dangerous Goods
		LC50: Lethal Concentration, 50%
		LD50: Lethal Dose, 50%
		LOAEL: Lowest Observed Adverse Effect Level
		Log Kow: Logarithm of the n-octanol/water partition coefficient
		NIOSH: National Institute for Occupational Safety and Health
		NOAEC: No Observed Adverse Effect Concentration
		NOAEL: No Observed Adverse Effect Level
		NTP: National Toxicology Program
		OECD: Organisation for Economic Co-operation and Development
		OSHA: (US) Occupational Safety & Health Administration
		OTC: Over-The-Counter
		PEL: Permissible Exposure Limit
		RCRA: Resource Conservation and Recovery Act
		REL: Recommended Exposure Limit
		RQ: Reportable Quantity
		SARA: Superfund Amendments and Reauthorization Act
		STEL: Short Term Exposure Limit
		STOT: Specific Target Organ Toxicity

		TLV: Threshold Limit Value
		TPQ: Threshold Planning Quantity
		TQ: Threshold Quantity
		TWA: Time Weighted Average
16.2	**Disclaimer:**	This Safety Data Sheet is intended to provide a brief summary of our knowledge and guidance regarding the use of this product. The information set forth herein has been compiled from sources considered to be reliable and is believed to be accurate as of the date of publication. This information is offered in good faith by Zogics and the accuracy, suitability or completeness is not guaranteed, and no warranties of any type, either expressed or implied, are provided. If this product(s) is combined with other materials, all component properties must be considered. The user assumes all liability for any damage or from any hazards inherent in the nature of the product.
16.3	**Last Revision Date:**	
16.4	**Reason for Revision:**	