SAFETY DATA SHEET



1. IDENTIFICATION		
Product identifier		
Product Name	SmartSan ES Fragrance Free Hand Sanitizer	
Other means of identification		
Synonyms	None	
Recommended use of the chemica	Il and restrictions on use	
Recommended use	Hand Sanitizer	
Uses advised against	No information available	
Distributor Address Best Sanitizers, Inc. PO Box 1360 Penn Valley, CA 95946		
Emergency telephone number Emergency Phone Numbers	For Transportation Emergencies,	

For Transportation Emergencies, call Chemtrec: 1-800-424-9300

This is a personal care or cosmetic product that is safe for users under normal and reasonably foreseeable use. While this material is not considered hazardous, the SDS contains valuable information critical to the safe handling and proper use of the product for industrial workplace conditions as well as unusual and unintended exposures such as large spills. This SDS should be retained and available for employees and other users of this product. For specific intended-use guidance, please refer to the information provided on the package or instruction sheet.

2. HAZARDS IDENTIFICATION

Classification

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

Flammable liquids	Category 2
Eye Irritation	Category 2A

Signal word		Warning			
Hazard statem Highly flammab	ents le liquid and vapor				
Appearance	Clear, colorless	Physical State	Thin liquid	Odor	Alcohol

Precautionary Statements - Prevention

Keep away from heat/sparks/open flames/hot surfaces. - 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.

Precautionary Statements - Response

In case of fire: Use dry chemical, carbon dioxide (CO₂), foam, or water spray to extinguish.

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool.

Precautionary Statements - Disposal

Dispose of contents in accordance with all applicable federal, state, and local regulations.

Hazards not otherwise classified (HNOC)

Inhalation of high concentrations of vapor or mist may cause irritation of the respiratory tract, headaches, dizziness, nausea, vomiting, and malaise. Ingestion may cause central nervous system depression, gastrointestinal irritation, nausea, vomiting, and diarrhea.

Other information

May cause slight eye irritation.

Interactions with Other Chemicals

Can react with strong oxidizers, inorganic acids, and halogens.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight %	Trade Secret	
Ethanol	64-17-5	60 - 70	*	
Isopropyl alcohol	67-63-0	5 - 10	*	
* The exact perc	entage (concentration) of composition has	s been withheld as a trade	secret.	
	4. FIRST AID MEASUR	RES		
First aid measures				
General Advice	Show this safety data sheet to the doc	tor in attendance.		
Eye Contact	Hold eye open and rinse slowly and gently with water for 15–20 minutes. If present, remove contact lenses, then continue rinsing eye. Call a poison control center or doctor for further treatment advice.			
Skin Contact	Not applicable.			
Inhalation	Move to fresh air. If breathing problems develop, call a doctor.			
Ingestion	Drink a glassful of water. Call a doctor or poison control center.			
Protection of First-aiders	Remove all ignition sources. Use personal protective equipment as required. Wear personal protective clothing (see section 8).			
Most important symptoms and eff	ects, both acute and delayed			
Most Important Symptoms and Effects	May cause slight eye irritation.			
Indication of any immediate medio	cal attention and special treatment nee	ded		
Notes to Physician	Treat symptomatically.			
	5. FIRE-FIGHTING MEAS	URES		
<u>Suitable Extinguishing Media</u> Dry chemical, carbon dioxide (CO ₂),	foam, or water spray.			
Unsuitable Extinguishing Media Use of water spray when fighting fire	e may be inefficient.			
Specific Hazards Arising from the	Chemical			

Alcohol flames may not be readily visible. Vapors are heavier than air and may travel to source of ignition and flash back. Vapors may form explosive mixtures with air.

Hazardous Combustion Products

Oxides of carbon.

Explosion Data

Sensitivity to Mechanical Impact No.

Sensitivity to Static Discharge Yes.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Keep containers cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Take precautionary measures against static discharges.			
Other Information	Refer to protective measures listed in Sections 7 and 8.			
Environmental precautions				
Environmental Precautions	Prevent entry into surface water or sanitary sewers. See Section 12 for additional ecological information.			
Methods and material for containme	ent and cleaning up			
Methods for Containment	Prevent further leakage or spillage if safe to do so.			
Methods for Cleaning Up	Eliminate all potential sources of ignition, and ventilate area. Absorb and containerize. Do not flush into surface water or sanitary sewer system.			
7. HANDLING AND STORAGE				
Precautions for safe handling				
Handling	Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink, or smoke when using this product.			
Conditions for safe storage, including	ng any incompatibilities			
Storage	Store in accordance all applicable regulations and fire codes. Keep containers tightly closed in a cool, well-ventilated place away from heat, sparks, open flames, and hot surfaces.			
Incompatible Products	Strong oxidizers, inorganic acids, and halogens.			

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethanol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m ³	IDLH: 3300 ppm 10% LEL TWA: 1000 ppm TWA: 1900 mg/m ³
Isopropanol Alcohol 67-63-0	STEL: 400 ppm	TWA: 400 ppm TWA: 980 mg/m ³	IDLH: 2200 ppm TWA: 400 ppm TWA: 980 mg/m ³

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Appropriate engineering controls

Engineering Measures

Showers Eyewash stations Ventilation systems

Individual protection measures, such as personal protective equipment			
Eye/Face Protection	None required for consumer use. If splashes are likely to occur, wear safety glasses.		
Skin and Body Protection	No special protective equipment required.		
Respiratory Protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.		
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.		

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State Appearance Color	Thin liquid Clear colorless	Odor Odor Threshold	Alcohol No information available
Property pH Melting/freezing point Boiling point / boiling range Flash Point Evaporation rate Flammability (solid, gas) Flammability Limits in Air Upper flammability limit	<u>Values</u> 5 - 7 No data available No data available ~21°C (closed cup) No data available No data available	Remarks/ Method None known None known None known None known None known None known	
Lower flammability limit Vapor pressure Vapor density Specific Gravity Water Solubility Solubility in other solvents Partition coefficient Autoignition temperature Decomposition temperature Kinematic viscosity Dynamic viscosity Explosive Properties Oxidizing Properties	No data available No data available No data available ~0.84 Complete No data available No data available	None known None known None known None known None known None known None known None known None known	
Other Information Softening Point VOC Content (%) Particle Size Particle Size Distribution	No data available No data available No data available No data available		

10. STABILITY AND REACTIVITY

Reactivity

Can react with strong oxidizers, inorganic acids, and halogens.

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None known.

Conditions to avoid

Keep away from heat, sparks, open flames, and hot surfaces.

Incompatible materials

Strong oxidizers, inorganic acids, and halogens.

Hazardous Decomposition Products

None known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	Inhalation of high concentrations of vapor or mist may cause irritation of the respiratory tract, headaches, dizziness, nausea, vomiting, and malaise.
Eye Contact	May cause slight irritation.
Skin Contact	Prolonged or repeated use may cause dryness and/or slight irritation.
Ingestion	Ingestion may cause central nervous system depression, gastrointestinal irritation, nausea, vomiting, and diarrhea.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Ethanol 64-17-5	-	-	125 mg/L (Rat, 4 h)
Isopropyl alcohol 67-63-0	4.4 g/kg (Rat)	12.9 g/kg (Rabbit)	16000 (Rat, 8 h)

Information on toxicological effects

Symptoms

May cause slight redness and tearing of eyes.

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

Mutagenic Effects No information available.

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen. Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage.

Chemical Name	ACGIH	IARC	NTP	OSHA
Ethanol 64-17-5	A3	Group 1	Known	Х
Isopropyl alcohol 67-63-0	-	Group 3	-	Х

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans; Group 3 - Not Classifiable as to Carcinogenicity in Humans NTP (National Toxicology Program)

Known - Known Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor) X - Present

Reproductive Toxicity	Ethanol has been shown to be a reproductive toxin only when consumed as an alcoholic
	beverage.

STOT - single exposure No information available.

Aspiration Hazard Not an aspiration hazard.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Ethanol 64-17-5		LC50: 12.0 - 16.0 mL/L (96 h static) Oncorhynchus mykiss LC50: 13400 - 15100 mg/L (96 h flow-through) Pimephales promelas LC50: > 100 mg/L (96 h static) Pimephales promelas	EC50 = 34634 mg/L 30 min EC50 = 35470 mg/L 5 min	LC50: 9268 - 14221 mg/L (48 h) Daphnia magna EC50: 10800 mg/L (24 h) Daphnia magna EC50: 2 mg/L (48 h Static) Daphnia magna
Isopropyl alcohol 67-63-0	96h EC50: > 1000 mg/L (Desmodesmus subspicatus) 72h EC50: > 1000 mg/L (Desmodesmus subspicatus)	(Pimephales promelas) 96h		48h EC50: 13299 mg/L
Glycerin 56-81-5		LC50: 51 - 57 mL/L (96 h static) Oncorhynchus mykiss		EC50: > 500 mg/L (24 h) Daphnia magna

Persistence and Degradability

No information available.

Bioaccumulation

Chemical Name	Log Pow
Ethanol 64-17-5	-0.32
Isopropyl alcohol 67-63-0	0.05

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

Disposal methods

Dispose of in accordance with all applicable federal, state, and local regulations.

Contaminated Packaging

Do not reuse empty containers. Dispose of in accordance with all applicable federal, state, and local regulations.

14. TRANSPORT INFORMATION

DOT

UN/ID/NA number : UN 1987 Proper shipping name : ALCOHOLS, N.O.S.

Class : 3 Packing group : II Labels : FLAMMABLE LIQUID ERG Code : 127 Marine pollutant : no

15. REGULATORY INFORMATION

Chemical Inventories

TSCA All components of this product are either on the TSCA 8(b) Inventory or otherwise exempt from listing.

DSL/NDSL All components are on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

U.S. 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	
Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

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 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

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

Chemical Name	California Proposition 65
Ethanol	Developmental
64-17-5	Developmental

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island
Ethanol 64-17-5		х		
Isopropyl alcohol 67-63-0	х	х	Х	х
Glycerin 56-81-5	х	х	Х	х

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazard 1	Flammability 3	Instability 0	Physical and Chemical Hazards -
HMIS	Health Hazard 2	Flammability 3	Physical Hazard 0	Personal Protection -
Prepared E	Зу	Technical Department		
Preparatio	n/Revision Date	January 1, 2024		
Version		6		

<u>General Disclaimer</u> 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