

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name PSSI E-SAN

Other means of identification

Product Code 20044

Recommended use of the chemical and restrictions on use

Recommended Use Antiseptic hand sanitizer

Uses advised against Follow the directions for use on the label when applying this product

Details of the supplier of the safety data sheet

Manufacturer Address

PSSI Chemical Innovations
3729 Peddle Hollow Road
Kieler, WI 53812 USA

Emergency telephone number

Company Phone Number 888-671-5366

Emergency Telephone Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

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

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

Label elements

Emergency Overview

DANGER

Hazard statements

Highly flammable liquid and vapor
Causes serious eye irritation



Physical state Liquid

Color Clear

Odor Alcoholic

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 only non-sparking tools
Take precautionary measures against static discharge
Use explosion-proof electrical/ventilating/lighting/equipment
Wear eye/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
IN CASE OF FIRE: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Volume-%
Ethanol	64-17-5	80%
Glycerol	56-81-5	1.45%
Hydrogen peroxide	7722-84-1	0.125%

4. FIRST AID MEASURES**First aid measures**

Eye contact	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. If eye irritation persists: Get medical advice/attention.
Skin contact	For accidental exposure to large quantities, not normal usage. Rinse skin with water. Get medical attention if irritation develops and persists.
Inhalation	Move person to fresh air. If breathing stops, give artificial respiration, get medical attention immediately.
Ingestion	Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. Call a physician immediately.

Most important symptoms and effects, both acute and delayed

Symptoms See Section 11 for symptom information.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES**Suitable extinguishing media**

Dry chemical. Water spray (fog). Carbon dioxide (CO₂). Foam.

Unsuitable extinguishing media Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

Flammable. 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 Carbon oxides.

Explosion data

Sensitivity to Mechanical Impact None.

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. Cool containers with flooding quantities of water until well after fire is out.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Personal precautions Use personal protection recommended in Section 8. Ensure adequate ventilation, especially in confined areas. Take precautionary measures against static discharges.

For emergency responders Isolate area. Keep unnecessary personnel away.

Environmental precautions

Environmental precautions See section 12 for additional ecological information. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so. Absorb with dry earth, sand or other non-combustible material.

Methods for cleaning up May be ignited by friction, heat, sparks or flames. Use clean non-sparking tools to collect absorbed material. Collect spillage. Sweep up and shovel into suitable containers for disposal. Following product recovery, flush area with water.

7. HANDLING AND STORAGE**Precautions for safe handling**

Advice on safe handling Do not handle near heat, sparks, or flame. Take precautionary measures against static discharges. Do not eat, drink or smoke when using this product. Use personal protection recommended in Section 8. Avoid contact with eyes. Use only in well-ventilated areas. Avoid breathing vapors or mists. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store in accordance all applicable regulations and fire codes. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep at temperatures between 40 - 100°F (4 - 38°C).

Incompatible materials Strong oxidizing agents. Inorganic acids. Halogens.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters**

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethanol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm, 1900 mg/m ³	IDLH: 3300 ppm TWA: 1000 ppm, 1900 mg/m ³

Legend

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.

STEL (Short Term Exposure Limit)

TWA (time-weighted average)

Appropriate engineering controls

Engineering Controls

Showers, eyewash stations, ventilation system.

Individual protection measures, such as personal protective equipment

Eye/face protection

None under normal use conditions. Safety glasses when the possibility of splashing exists.

Skin and body protection

None under normal use conditions. If splashes are likely to occur: Long sleeved shirt, long pants, and apron.

Respiratory protection

If irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

General Hygiene Considerations

Wash contaminated clothing and shoes before reuse. Do not eat, drink or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid	Odor	Alcoholic
Appearance	Aqueous solution	Odor threshold	No information available
Color	Clear	Remarks • Method	
Property	Values		
pH	Not applicable		
Melting point / freezing point	No information available		
Boiling point / boiling range	No information available		
Flash point	~ 13 °C / ~ 55 °F		Pensky-Martens Closed Cup (PMCC)
Evaporation rate	No information available		
Flammability (solid, gas)	No information available		
Flammability Limit in Air			
Upper flammability limit:	No information available		
Lower flammability limit:	No information available		
Vapor pressure	No information available		
Vapor density	No information available		
Specific Gravity	0.860-0.885 g/cc		
Water solubility	Soluble in water		
Solubility in other solvents	No information available		
Partition coefficient	No information available		
Autoignition temperature	No information available		
Decomposition temperature	No information available		
Kinematic viscosity	No information available		
Dynamic viscosity	No information available		
Explosive properties	No information available		
Oxidizing properties	No information available		
VOC Content (%)	77.4%		

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous polymerization

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents. Inorganic acids. Halogens.

Hazardous Decomposition Products

Carbon oxides.

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	Direct eye contact causes eye irritation and redness of eye tissues.
Skin Contact	May cause open cuts to burn or sting. Repeated exposure may cause skin dryness or cracking.
Ingestion	Ingestion may cause central nervous system depression, gastrointestinal irritation, nausea, vomiting, and diarrhea.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Ethanol 64-17-5	= 7060 mg/kg (Rat)	-	= 124.7 mg/L (Rat) 4 h
Glycerol 56-81-5	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 570 mg/m ³ (Rat) 1 h
Hydrogen peroxide 7722-84-1	= 1518 mg/kg (Rat)	= 9200 mg/kg (Rabbit)	= 2000 mg/m ³ (Rat) 4 h

Information on toxicological effects

Symptoms No information available.

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

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.

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

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard Not an aspiration hazard.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 79.3563 % of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document

Oral LD50 8,994.50 mg/kg

Mist 6.95 mg/l

12. ECOLOGICAL INFORMATION**Ecotoxicity**

May be harmful to aquatic life.

0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Ethanol 64-17-5	-	12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through	9268 - 14221: 48 h Daphnia magna mg/L LC50 2: 48 h Daphnia magna mg/L EC50 Static 10800: 24 h Daphnia magna mg/L EC50
Glycerol 56-81-5	-	51 - 57: 96 h Oncorhynchus mykiss mL/L LC50 static	500: 24 h Daphnia magna mg/L EC50
Hydrogen peroxide 7722-84-1	2.5: 72 h Chlorella vulgaris mg/L EC50	16.4: 96 h Pimephales promelas mg/L LC50 18 - 56: 96 h Lepomis macrochirus mg/L LC50 static 10.0 - 32.0: 96 h Oncorhynchus mykiss mg/L LC50 static	18 - 32: 48 h Daphnia magna mg/L EC50 Static 7.7: 24 h Daphnia magna mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation

Not expected to bioaccumulate.

Mobility

Soluble in water.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS**Waste treatment methods**

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Dispose of in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

Note: Limited quantities (LQ) for packages under one liter.

DOT

UN/ID No. 1993

Proper shipping name Flammable liquids, n.o.s. (contains ethanol)

Hazard Class	3
Packing Group	II
Emergency Response Guide Number	127

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies

Legend:

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

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

Acute health hazard	Yes
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

Ethyl alcohol is only considered a Proposition 65 developmental hazard when it is ingested as an alcoholic beverage

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Ethanol 64-17-5	X	X	X
Glycerol 56-81-5	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

NFPA	Health hazards 2	Flammability 3	Instability 0	Physical and Chemical Properties None
HMIS	Health hazards 2	Flammability 3	Physical hazards 0	
				Personal protection A (safety glasses)

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Revision Note	Specific gravity update

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 health hazards given on this SDS apply to this product in its concentrated form (as supplied) and may differ significantly at use dilution. The signs and symptoms of exposure apply only to negligence in handling or misuse of the concentrated product and not to the routine exposure of the diluted product under conditions of ordinary use.

End of Safety Data Sheet