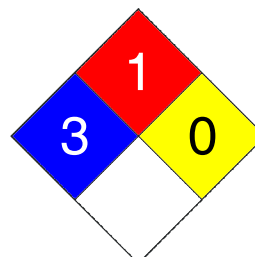


1. Product and Company Identification

Product Name Sani-System Liquid Sanitizer Concentrate
CAS # Mixture
Product use Water Softener Sanitizer, RO Unit Sanitizer
Manufacturer Pro Products LLC
 7201 Engle Road
 Fort Wayne, IN 46804-5875 US
 Phone 260-483-2519
 Emergency Phone: 1-800-424-9300 (CHEMTREC)

LEGEND HMIS/NFPA	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	/ 3
Flammability	1
Physical Hazard	0
Personal Protection	X



2. Hazards Identification

Emergency overview DANGER
 CAUSES EYE BURNS. CAUSES SKIN BURNS.

Potential short term health effects

Routes of exposure Eye, Skin contact, Skin absorption, Inhalation, Ingestion.

Eyes Causes chemical burns. May cause blindness.

Skin Causes chemical burns.

Inhalation May cause respiratory tract irritation.

Ingestion Harmful if swallowed. May cause chemical burns to mouth, throat and stomach.

Target organs Eyes. Skin. Respiratory system. Mucous membranes.

Chronic effects Prolonged or repeated exposure can cause drying, defatting and dermatitis.

Signs and symptoms The product causes burns of eyes, skin and mucous membranes.

OSHA Regulatory Status This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Potential environmental effects See section 12.

3. Composition / Information on Ingredients

Ingredient(s)	CAS #	Percent
Benzyl-C12-18-alkyldimethyl ammonium chlorides	68391-01-5	7 - 13
Quaternary ammonium compounds, C12-18-alkyl [(ethylphenyl) methyl] dimethyl, chlorides	68956-79-6	7 - 13
Ethanol	64-17-5	0.5 - 1.5

4. First Aid Measures

First aid procedures

Eye contact Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Skin contact Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Inhalation Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

Ingestion	Do not induce vomiting. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.
Notes to physician	Probable mucosal damage may contraindicate the use of gastric lavage.
General advice	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

5. Fire Fighting Measures

Flammable properties	Not flammable by WHMIS/OSHA criteria.
Extinguishing media	
Suitable extinguishing media	Dry chemical, foam, carbon dioxide, water fog.
Unsuitable extinguishing media	Not available
Protection of firefighters	
Specific hazards arising from the chemical	Not available
Protective equipment for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus.
Hazardous combustion products	May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Ammonia.
Explosion data	
Sensitivity to mechanical impact	Not available
Sensitivity to static discharge	Not available

6. Accidental Release Measures

Personal precautions	Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.
Environmental precautions	Prevent entry into waterways, sewers, basements or confined areas.
Methods for containment	Stop leak if you can do so without risk.
Methods for cleaning up	Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labelled containers. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. Never return spills to original containers for re-use.

7. Handling and Storage

Handling	Use good industrial hygiene practices in handling this material. Do not get in eyes, on skin or on clothing. Avoid breathing vapors or mists of this product. Use only with adequate ventilation. Wash thoroughly after handling.
Storage	Keep out of the reach of children. Store in a closed container away from incompatible materials. Store in a dry place no lower in temperature than 50°F or higher than 120°F.

8. Exposure Controls / Personal Protection

Exposure limits

Ingredient(s)	Exposure Limits
Benzyl-C12-18-alkyldimethyl ammonium chlorides	ACGIH-TLV Not established OSHA-PEL Not established
Ethanol	ACGIH-TLV TWA: 1000 ppm STEL: 1000 ppm OSHA-PEL TWA: 1000 ppm
Quaternary ammonium compounds, C12-18-alkyl [(ethylphenyl) methyl] dimethyl, chlorides	ACGIH-TLV Not established OSHA-PEL Not established

Engineering controls

General ventilation normally adequate. Local exhaust is suggested for use, where possible, in enclosed or confined spaces.

Personal protective equipment

Eye / face protection

Wear chemical goggles. Use a face shield if splashing is possible.

Hand protection

Impervious gloves. Confirm with reputable supplier first.

Skin and body protection

As required by employer code. Use of an impervious apron is recommended.

Respiratory protection

Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.

General hygiene considerations

Eye wash fountain and emergency showers are recommended. Use good industrial hygiene practices in handling this material. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Appearance	Clear.
Color	Colorless
Form	Liquid
Odor	Odorless
Odor threshold	Not available
Physical state	Liquid
pH	7.8
Melting point	Not available
Freezing point	Not available
Boiling point	212.00 °F (100 °C)
Pour point	Not available
Evaporation rate	< 1 (ethyl ether=1)
Flash point	> 201 °F (> 93.88 °C) Pensky-Martens Closed Cup
Auto-ignition temperature	Not available
Flammability limits in air, lower, % by volume	Not available
Flammability limits in air, upper, % by volume	Not available
Vapor pressure	Not available
Vapor density	< 1 (air=1)
Specific gravity	8.26
Octanol/water coefficient	Not available
Percent volatile	80 % (w/w includes water)

10. Stability and Reactivity

Reactivity	None known.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Do not mix with other chemicals.
Incompatible materials	Oxidizers. Reducing agents.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Ammonia.

11. Toxicological Information

Component analysis - LC50

Ingredient(s)	LC50
Benzyl-C12-18-alkyldimethyl ammonium chlorides	Not available
Ethanol	31623 ppm rat
Quaternary ammonium compounds, C12-18-alkyl [(ethylphenyl) methyl] dimethyl, chlorides	Not available

Component analysis - Oral LD50

Ingredient(s)	LD50
Benzyl-C12-18-alkyldimethyl ammonium chlorides	240 mg/kg rat
Ethanol	3450 mg/kg mouse; 7060 mg/kg rat
Quaternary ammonium compounds, C12-18-alkyl [(ethylphenyl) methyl] dimethyl, chlorides	250 mg/kg rat

Effects of acute exposure

Eye	Causes chemical burns. May cause blindness.
Skin	Causes chemical burns.
Inhalation	May cause respiratory tract irritation.
Ingestion	Harmful if swallowed. May cause chemical burns to mouth, throat and stomach.
Sensitization	Non-hazardous by WHMIS/OSHA criteria.
Chronic effects	Non-hazardous by WHMIS/OSHA criteria.
Carcinogenicity	See below.

ACGIH - Threshold Limit Values - Carcinogens

Ethanol 64-17-5 A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

IARC - Group 1 (Carcinogenic to Humans)

Ethanol 64-17-5 Monograph 100E [in preparation] (in alcoholic beverages); Monograph 96 [2010] (in alcoholic beverages)

Mutagenicity Non-hazardous by WHMIS/OSHA criteria.

Reproductive effects Non-hazardous by WHMIS/OSHA criteria.

Teratogenicity Non-hazardous by WHMIS/OSHA criteria.

Name of Toxicologically Synergistic Products Not available

12. Ecological Information

Ecotoxicity	See below
Ecotoxicity - Freshwater Fish - Acute Toxicity Data	
Ethanol 64-17-5	96 Hr LC50 Oncorhynchus mykiss: 12.0 - 16.0 mL/L [static]; 96 Hr LC50 Pimephales promelas: >100 mg/L [static]; 96 Hr LC50 Pimephales promelas: 13400 - 15100 mg/L [flow-through]
Ecotoxicity - Water Flea - Acute Toxicity Data	
Ethanol 64-17-5	48 Hr LC50 Daphnia magna: 9268 - 14221 mg/L; 24 Hr EC50 Daphnia magna: 10800 mg/L; 48 Hr EC50 Daphnia magna: 2 mg/L [Static]
Persistence / degradability	Not available
Bioaccumulation / accumulation	Not available
Mobility in environmental media	Not available
Environmental effects	Not available

Aquatic toxicity	Not available
Partition coefficient	Not available
Chemical fate information	Not available
Other adverse effects	Not available

13. Disposal Considerations

Disposal instructions	Review federal, state/provincial, and local government requirements prior to disposal.
Waste from residues / unused products	Not available
Contaminated packaging	Not available

14. Transport Information

U.S. Department of Transportation (DOT)

Basic shipping requirements:

Proper shipping name	Corrosive liquids, n.o.s. (BENZYL-C12-18-ALKYLDIMETHYL AMMONIUM CHLORIDES)
Hazard class	8
UN number	UN1760
Packing group	III
Additional information:	
Special provisions	IB3, T7, TP1, TP28
Packaging exceptions	154
ERG number	154



Transportation of Dangerous Goods (TDG - Canada)

Basic shipping requirements:

Proper shipping name	CORROSIVE LIQUID, N.O.S. (BENZYL-C12-18-ALKYLDIMETHYL AMMONIUM CHLORIDES)
Hazard class	8
UN number	UN1760
Packing group	III
Additional information:	
Special provisions	16



15. Regulatory Information

Canadian federal regulations This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Canada - WHMIS - Ingredient Disclosure List

Ethanol	64-17-5	0.1 %
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WHMIS status	Controlled
WHMIS classification	Class E - Corrosive Material
WHMIS labeling	



Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

US Federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

CERCLA (Superfund) reportable quantity
None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

Clean Air Act (CAA) Not available

Clean Water Act (CWA) Not available

State regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances

Ethanol 64-17-5 Present (refers to solutions >=25% which are not beverage alcohols)

U.S. - California - Proposition 65 - Carcinogens List

Ethanol 64-17-5 carcinogen, initial date 5/3/11

U.S. - California - Proposition 65 - Developmental Toxicity

Ethanol 64-17-5 developmental toxicity, initial date 10/1/87 (when in alcoholic beverages)

U.S. - Massachusetts - Right To Know List

Ethanol 64-17-5 Teratogen

U.S. - Minnesota - Hazardous Substance List

Ethanol 64-17-5 Present

U.S. - New Jersey - Right to Know Hazardous Substance List

Ethanol 64-17-5 sn 0844

U.S. - Pennsylvania - RTK (Right to Know) List

Ethanol 64-17-5 Present

U.S. - Rhode Island - Hazardous Substance List

Ethanol 64-17-5 Toxic; Flammable

Inventory name

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information**Disclaimer**

The data contained in this material safety data sheet was obtained from sources that were technically accurate, reliable, and state of the art when this document was prepared. If data was unavailable to complete certain sections, the absence of that data is identified in this document. Because the supplier cannot know the exact circumstances during actual use of this product, other hazards, exposure scenarios, disposal considerations, and regulations may apply and it is the responsibility of the user to read and understand the product label and this document before use. Do not use the product for purposes other than those stated in Section 1.

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Prepared by Dell Tech Laboratories Ltd. (519) 858-5021

Other information For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.