





Date Revised :

02 / 15

Supercedes:

05 / 09

PROSAN - L FOOD CONTACT SURFACE SANITIZER KILLS 99.999% OF GERMS NO RINSE REQUIRED READY - TO - USE

SECTION 1: IDENTIFICATION OF SUBSTANCE / COMPANY

PRODUCT NAME / IDENTIFIER:

PRIMARY APPLICATION / RECOMMENDED USAGE :.

**DISTRIBUTED EXCLUSIVELY BY:** 

INFORMATION TELEPHONE: EMERGENCY TELEPHONE: USAGE RESTRICTIONS:

" PROSAN-L " Bio-based Sanitizer for Direct Food Contact Surfaces

(EPA Registration #: 71094-2)

Kills 99.999% of both gram positive and gram negative bacterium - Broad Spectrum Kill: 100 million bacteria in 30 seconds on contact.. Made with USDA & FDA approved food grade ingredients . Certified for bio-based content by the USDA and registered as a sanitizer with the US - EPA as a "No-Rinse" food contact surface sanitizer. Kills germs on any surface that comes in contact with food like cutting boards, counters, dishes, and cooking utensils . Leaves Absolutely NO Chemical Residues on Hard Surfaces . Ideal for use around cafeteria tables, kitchens, snack bars, classrooms & office desks. No Synthetic Chemicals, Non - corrosive, Readyto-Use, Unscented.

HEALTHY CLEAN BUILDINGS

4 Wilmington Drive
Melville, New York 11747
1-631-643-1882
1-888-342-6279
Refer to Product label

SECTION 2: HAZARD(S) IDENTIFICATION

#### Classification of the substance or mixture ( GHS-US ):

NOTE: Prolonged contact with skin or eyes may cause minor physical irritation. Ingredients used to make this product are not acutely toxic.

Label Elements
Hazard Pictograms

nazaru Pictogram

**(!)** 

Mild Skin & Eye Irritant

( GHS-US Labeling )

Warnir

Signal Word : Hazards :

H316: May Cause Mild Skin Irritation.

H320: May Cause Eye Irritation.



KILLS 99.999% OF GERMS NO RINSE REQUIRED READY – TO - USE

### HAZARD (S) IDENTIFICATION (continued)

Precautionary Statements: P101: If medical advice is required, have product container or label available.

P102 Keep Out of Reach of Children P103 . Read Label Before Use .

P264 : In the Event of Direct Contact , Wash Hands and Forearms Thoroughly After Handling P305+P351+P338 – If In Eyes via Direct Contact , Rinse Cautiously with Water for Several Minutes .

If Easy To Do, Remove Contact Lenses .Continue Rinsing

P337+P313 - If Eye Irritation Persists, Get Medical Advice / Attention.

Other Hazards: None

Ingredients with Unknown Acute Toxicity: None

#### SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS:

Chemical characterization: Non-hazardous, citric acid - based liquid. This product kills Gram + Staph, Aureus; and Gram - E. coli. None of the ingredients is considered hazardous according to the criteria of OSHA 29CFR1910.1200 and DOT Reg 49 CFR 172. Ingredients are listed for informational purposes to assist emergency medical response personnel.:

Ingredients	CAS #	Weight % Table Z -1 - A		Z -1 -A	NTP, IARC, or OSHA	
			TWA mg/m3	STEL mg/m3	CEILING mg / m3	Carcinogen
Citric Acid	77-92-9	0.660	NE	NE	NE	NO
Sodium Dodecylbenzene Sulfonate	25155 – 30 - 0	0.036	NE	NE	NE	NO
Deionized Water + Inert Ingredients	7732-18-5	99.304	NE	NE	NE	NO

Component Disclosure ("PROSAN - L")

NOTE: Exact Percentages (concentrations) of compositions are withheld as trade secrets.

### **SECTION 4: FIRST AID MEASURES**

### Description of Necessary Measures:

General Advice Under Extreme Exposure: May be irritating to eyes. May cause skin and respiratory tract irritation. Consult a Medical Physician After Inhalation: Move to fresh air. Keep individual at rest in a position comfortable for breathing. Perform artificial respiration if not breathing. If breathing is difficult, use oxygen treatment. Consult a doctor if adverse conditions persist. (P 261)

After Skin Contact: Wash with plenty of mild soap and water; followed by a warm water rinse. Apply a topical antiseptic agent to open wounds or broken skin. Thoroughly clean and dry contaminated clothes and shoes before re-use. If skin irritation or rash persists, seek medical attention. (P332+P313)

After Eye Contact: Prolonged exposure may cause mild irritation to the eye tissue if not removed. In case of extreme contact, immediately flush eyes with large quantities of warm running water for 15 minutes, lifting upper and lower lids occasionally. If easy to do, remove contact lenses Continue water rinsing. (305+P351+P338) Do Not allow individual to rub or keep eyes closed. If eye irritation persists such as blinking, redness, or pain, seek medical attention. (P337 + P313).



## KILLS 99.999% OF GERMS NO RINSE REQUIRED READY – TO - USE

### FIRST AID MEASURES (continued)

**After Ingestion:** May cause nausea. Rinse mouth with milk or water. DO NOT induce vomiting. If patient is fully conscious, continue to rinse mouth with milk or water and drink 2-3 glasses of milk or water. Never give anything by mouth if victim is conscious, rapidly losing consciousness, or is convulsing. If adverse conditions persist, call a Poison Control Center / Doctor / Physician, if necessary (P312). **NOTE to Physicians:** Treat symptomatically.

**NOTE**: According to FHSA Method 16 CFR 1500 this product should not be a skin or eye irritant. Prolonged contact with eyes may cause minor physical irritation. Ingredients used to make this product are not acutely toxic.

#### SECTION 5 : FIRE FIGHTING MEASURES :

Flashpoint (°F, °C, PMCC): Non Established = <212°F

Suitable Extinguishing Media: Water, Water Spray, Dry Powder,

Foam, Carbon Dioxide (CO2)

Auto-Ignition Temperature: 653°F (345°C)

Hazardous Decomposition Products: Carbon Oxides

 $\textbf{Flammability}: \textbf{N} ot \ \textbf{Flammable} \ or \ \textbf{Combustible} \ ( \ \textbf{Aqueous-based} \ )$ 

Unsuitable Extinguishing Media: None

Lower Flammable Limits: 8% at 149 °F (65 °C)

Upper Flammable Limits: Not Available

 $\textbf{Special Protective Equipment for Fire Fighters}: \ \ \text{Fire Fighters should wear NIOSH approved}, \ \text{self-contained breathing apparatus}.$ 

#### SECTION 6: ACCIDENTIAL RELEASE MEASURES

Exercise caution from slipping on leaked / spilled product . Mop up excess product . Rinse several times with water .

Leak and Spill Procedure: Small Spills: Contain spill. Absorb spill with an inert absorbent powder. Rinse area with water. Large Spills: Dike or dam spill. Pump to empty labeled containers or collect excess product by best means possible for disposal. Flush remaining product from spill with water to clean up residue. Absorb slurry with an appropriate liquid-binding absorbent ( ie: sand, diatomite, universal binders, sawdust). Dispose effected absorbent into empty, labeled containers for removal.

**Environmental Precautions:** Make best efforts to prevent entry into sewers and public waters. This product contains no reportable quantities of toxic chemicals subject to reporting requirements of Section 313 of SARA Title III Emergency Planning and Community Right-To-Know Act of 1968 and of 40 CFR Part 372.

### **SECTION 7: HANDLING & STORAGE REQUIREMENTS**

### KEEP OUT OF REACH OF CHILDREN

Precautions for Safe Handling: Read product literature, label, and SDS before use. Use product strictly according to label directions. Refer to the product label for specific organisms controlled by Prosan – L. Close container tightly when not in use. Wash hands and other exposed areas with soap and water before eating, drinking, smoking; or when leaving work. Provide adequate ventilation in storage area. Avoid contact with moist air and steam. Avoid personal contamination after a spill.

Precautions To Be Taken in Handling & Storing: Protect from freezing. Product shelf life is best retained by storing at 45-100  $^{\circ}$  F. Hygiene Measures: Wash hands and forearms thoroughly after handling. Launder soiled, contaminated clothing before re-use. Safe Storage Conditions: Keep in original container in a cool, well-ventilated place away from incompatible substances and open flames. Close container tightly when not in use.

Incompatible Products: Not Known Incompatible Circumstances: Not Known



KILLS 99.999% OF GERMS NO RINSE REQUIRED READY – TO - USE

#### SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

No special protection or precautions have been identified for using this product under directed consumer use conditions. The following recommendations are given for production facilities and for other conditions & situations where there is increased potential for accidential, large-scale or prolonged exposure.

Work / Hygienic Practices: Avoid direct eye and skin contact. If irritation occurs, flush thoroughly with water. When product is applied to a floor surface, signage should be used to indicate slippery areas until they are dry. Wash contaminated clothing before re-use.

Workplace Control Parameters: Relatively no effect if exposed in small amounts. Relative to other acidic materials, a single dose of this product is rarely toxic by inhalation or ingestion. When ingested in small amounts, a numbness of the mouth and/or irritation of the stomach can develop. After prolonged contact, eye irritation may occur. After repeated and / or prolonged contact with skin, dermatitis and skin sensitization may develop. Slight "redness" may develop on hands and forearms if individual has a history of dermal allergic reaction.

**Engineering Controls:** Use adequate, general ventilation to minimize exposure to mist and to keep; airborne concentrations low. Facilities storing or utilizing this material should be equipped with an eyewash station and safety shower.

Local Exhaust: Not required.

**Exposure Limits:** 

Chemical Name :	ACGIH:	NIOSH	OSHA - Final PELs
Citric Acid ( CAS # : 77-92-9 )	None Listed	None Listed	None Listed
Sodium Dodecylbenzene Sulfonate ( CAS # : 25155 – 30 – 0 )	None Listed	None Listed	None Listed

#### **Exposure Controls:**

Personal Protective Equipment: Not normally required. If prolonged or repeated seems likely, eye and hand protection is recommended.

Hand protection: Not necessary but good practice to wear chemical -resistant gloves

Eye Protection: Chemical goggles or safety glasses as described by OSHA Regulation 29 CFR 1910.133 or European Standard EN 166. Respiratory Protection: Not necessary but good practice to wear appropriate mask. Follow the OSHA Respirator Regulations found in 29CFR 1910.134 or European Standard EN 149. Whenever necessary, always use a NIOSH or European Standard EN Approved Respirator. Other Information: Do Not eat, drink, or smoke during use

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid Color: Clear Odor: Mostly Odorless pH (as is): 2.4 +/or-.05 Relative Evaporation Rate: Equivalent to Water Melting Point: NA

Freezing Point : < 32 °F, < 0 °C

Solubility in Water : Water Soluble

Boiling Point : >212 °F

Specific Gravity (Water = 1) : > 1

Flammability : NA

VOC Content ( % Wt . ) : 0.00% ( 0.000 lbs/ gallon ) Vapor Pressure : Like Water Vapor Density ( Air = 1 ) : < 1

Partition coefficient: (n-octanol/water) Undetermined Auto-ignition Temperature: Undetermined Decomposition Temp.: Undetermined

#### **SECTION 10: STABILITY AND REACTIVITY**

Reactivity: No Additional Information Available
Possibility of Hazardous Reactions: Undetermined
Incompatible Materials: High Alkalis / Sulfides /

Oxidizing Agents, (inorganic)/Hypochlorites, Metal Nitrates/ Alkali Carbonates/ Potassium Tartrate/Acetates/ Bicarbonates Chemical stability: Stable under Normal Condition s

Conditions to Avoid: Direct Sunlight. Extremely High or Low Temperatures Hazardous Decomposition By-products: Carbon Monoxide, Carbon Dioxide

Fumes Hazardous Polymerization: Should not occur

PROSAN L Food Contact Surface Sanitizer page 4



## KILLS 99.999% OF GERMS NO RINSE REQUIRED READY – TO - USE

**SECTION 11: TOXICOLOGICAL INFORMATION** 

Information on Toxicological Effects ( "PROSAN-L"): Relatively non-toxic antimicrobial. This product does not contain any known or anticipated carcinogens according to the criteria of the NTP Annual report on Carcinogens, OSHA 29 CFR 1900.1000, SUBPART Z, or the IARC Monographs. Likely Routes of Exposure:

Inhalation: No Irritant Effect

Skin Contact: No Irritant Effect. Sensitization possible through skin contact.

Eye Contact : Minor Irritating Effect Ingestion : None Under Normal Use

Symptoms Related to the Physical, Chemical, and Toxilogical Characteristics ("PROSAN-L"): No Further Information

Available Delayed and Immediate Effects ( Chronic Effects from Short and Long Term Exposure ) ( "PROSAN-L" ): No Further Information

Measures of Toxicity ( "PROSAN-L" ) : No Further Information Available

Teratogenicity, Mutagenicity ("PROSAN-L"): Does Not contain any recognized toxicants.

Reproductive Toxicity ("PROSAN-L"): Does Not contain any recognized toxicants.

Specific Target Organ Toxicity (Single Exposure) ("PROSAN-L"): Does Not contain any recognized toxicants.

Specific Target Organ Toxicity (Repeated Exposure) ("PROSAN-L"): Does Not contain any recognized toxicants.

Carcinogenic Categories ("PROSAN-L"): This product does not contain any substances that are considered by ACGIH, OSHA, or NTP to be human carcinogens.

NTP (National Toxicity Program) ("PROSAN-L"): None of the Ingredients are listed as of this date.

IARC (International Agency for Research on Cancer) ("PROSAN-L"): None of the Ingredients are listed as of this date.

OSHA ( Occupational Safety and Health Administration ) ( "PROSAN-L" ): None of the Ingredients are listed as of this date .

Acute Toxicity: (Ingredients - see tables below)

Product / Ingredients name	Result	Species	Exposure
Citric Acid ( CAS# 77-92-9 )	LD50	Rat	Oral = >5000 mg/ Kg
	LD50	Rat	Dermal = >5000 mg/ Kg
	Primary Eye Irritation	Rabbit	Category IV – Slightly Irritating

Product / Ingredient Name :	Result:	Species :	Exposure:
Sodium Dodecylbenzene Sulfonate			
cas # : 25155 - 30 - 0	LD50	Rat	Oral = 438 mg/ kg
( @ Min. 95 % Powder )			
	LD50	Mouse	Intravenous = 105 mg/ kg
	LD50		Oral = 1330 mg/ kg



NO RINSE REQUIRED
READY – TO - USE

#### TOXICOLOGICAL INFORMATION (continued)

Skin Corrosion / Irritation ("PROSAN-L"): Not classified

Skin Sensitization ("PROSAN-L"): Not classified, except for personal allergic reactions.

Serious Eye Damage / Irritation ( "PROSAN-L" ): Not classified

Respiratory Sensitization ("PROSAN-L"): Not classifed

**Neurotoxicity ("PROSAN-L"):** None Known **Epidemiology ("PROSAN-L"):** None Known

### **SECTION 12: ECOLOGICAL INFORMATION**

ENVIRONMENTAL ACCREDITATIONS ("PROSAN-L"):

USDA Bio-preferred Program,

2005 AWARD RECIPIENT - THE PRESIDENTIAL GREEN CHEMISTRY CHALLENGE

ECOTOXICITY ("PROSAN L"): None

ECOTOXICITY ( " Citric Acid " -See Below ) :

Mobility: Completely Soluble

Persistence / Degradability Chemical Oxygen Demand ( COD ): 750 ( 50 mg 02 / g )

Biochemical Oxygen Demand Within 5 Days (BODS): 625 (50 mg 02/g)

DIN 38412 Part 25 ( DIN EN ISO 9880 ): Readily biodegradable ( 98% after 2 days ) \*

Aquatic Toxicity ( " Citric Acid " -See Below ) :

DIN 38412 Part 15 ( DIN EN ISO 7346 ) - Toxicity to Fish: 440 - 706 mg / L

DIN 38412 Part 5 ( DIN EN ISO 7346 ) - Toxicity to Bacteria - 10,000 mg / L

Fish Toxicity: LC100-Goldfish-894 mg/L -Lifetime Exposure in Hard Water; LD0 Goldfish-625 ,mg/L - Lifetime Exposure in Hard Water (Ellis, M.M. Detection and Measurement of Stream Pollution, 1937, 22, XLVII, 365 Brit. Fisheries Bulletin); Invertebrate Toxicity: LD100 Daphnia Magna-120 mg/L - Lifetime Exposure in Soft Water; LD0 Daphnia Magna-80 mg/L - Lifetime Exposure in Soft Water;

Toxicity Threshold: Pseudomonas Putida > 10 g / L; Scenedesmus Quadricauda -640 mg/L; Entosiphon Sulcatum 485 mg/L (Bringmann G et al Water Res.1980, 14, 231-241).

Environmental ("Citric Acid"):

Nitrification Inhibition . Nitrosomonas sp- 100 mg/L - No Inhibition of Ammonia Oxidation ( Hockenbury, M.R. et al

J.Water Polution Control Fed. 1799, 49 (5 ) , 768-777 ) . Degradation Studies : 70-100% Removal by Activated Sludge at 20°C for

120 hr. ( Muto, N. et al Kenkyou Hokuku - Kanto Gakuin Daigaku Kogakuku , 1987, 31 ( 2 ) , 257-266 Japan .

Other: BODS 0.420; BOD20-0.610; ThOD - 0.686 mg/L O2 respectively (Meinck, F. et al Les Eaux Residuaires Industrielles 1970);

Biodegradable (Ministry of International Trade and Industry (MITI) Report, 1984, Japan).

Ecotoxicity / Ingredients /Species:

### Sodium Dodecylbenzene Sulfonate ( cas #: 25155 - 30 - 0) @ Min. 95 % Powder : See Below

Result:	Species:	Period:	Exposure:
EC50	Daphnia Magna	48 h	5.88 mg/ L
LC50	Lepomis Macrochirus	96 h	1.18 mg/ L
LC50	Oncorhynchus Mykiss	96 h	1.68 mg/ L
LC50	Lepomis Macrochirus	96 h	6.5 mg/ L

Environmental ("Sodium dodecylbenzenesulfonate"): Used as an anionic detergent results in its release into the environment through various waste streams. Sodium dodecylbenzenesulfonate has high mobility in soil. Volatilization of sodium dodecylbenzenesulfonate is not expected from moist or dry soils. In water, sodium dodecylbenzenesulfonate is expected to be essentially non-volatile. Bioconcentration, adsorption to sediment, and hydrolysis are not expected to be important in aquatic systems. Biodegradation of sodium dodecylbenzenesulfonate is an important fate process in both aerobic soil and aquatic conditions based on a variety of biodegradation studies. Sodium dodecylbenzenesulfonate exists in the particulate phase in the ambient atmosphere. Removal of sodium dodecylbenzenesulfonate from the atmosphere can occur though wet deposition.

PROSAN L Food Contact Surface Sanitizer



# NO RINSE REQUIRED READY – TO - USE

**ECOLOGICAL INFORMATION: (continued)** 

#### **SECTION 13: DISPOSAL CONSIDERATIONS**

RCRA Classification: Non-hazardous

Waste Disposal Recommendations: Dispose in safe manner in accordance with local / state/federal regulations.

Dispose of contents / container in accordance with local/regional/national/international regulations . Can be incinerated with conventional waste stream after consulting with the waste disposal facility operator and the pertinent authorities while adhering to the necessary regulations .

Ecology - Waste Materials : Avoid release into environment .

Recommended Cleansing Agents: Water Only

### **SECTION 14: TRANSPORT INFORMATION**

#### SECTION 15: REGULATORY INFORMATION

TSCA Inventory: All components are listed. (TSCA Health & Safety Reporting List: None of the Ingredients are listed; TSCA Chemical Test Rules: None of the Ingredients are listed; TSCA Section 12b: None of the Ingredients are listed; TSCA Significant New Use Rule: None of the ingredients has a SNUR.)

CERCLA: No RQ was assigned to silver compounds . See 50FR13456 (April 4, 1985)

ARA 302 / 304: None of the ingredients has a RQ or a TPQ.

OSHA: None of the ingredients are considered hazardous.

SARA 311 / 312: None of the ingredients are reportable.

Clean Air: None of the ingredients are a Hazardous Air Pollutant, Class 1 Ozone Depleter, or Class 2, Ozone Depleter.

Clean Water Act: None of the ingredients are a Hazardous Substance, Priority Pollutant, or Toxic Pollutant.

California Proposition 65: None of the ingredients are listed.

International Regulations:

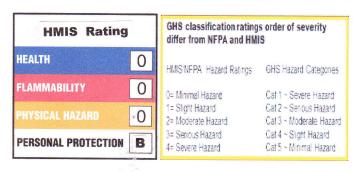


NO RINSE REQUIRED
READY – TO - USE

**SECTION 16: OTHER INFORMATION** 



Manufacturer of "Prosan - L" is an Affiliate Partner of the NASA Food Technology for Commercial Space Center



DISCLAIMER: This document is intended to provide a brief summary of our present knowledge and guidance regarding the use of this material. The information set forth herein has been compiled from sources to be dependable and is believed to be accurate as of the date of issuance. This information is offered in good faith by HEALTHY CLEAN BUILDINGS and no warranty, expressed or implied, is made. The user assumes all liability for any damage or injury resulting from misuse, from any failure to adhere to recommended practices according to product label (and such), or from any hazards inherent in the nature of the product. This document shall not constitute a guarantee for any specific product features and shall not establish a legally valid contracted relationship.

Footnotes: CALC-Calculated; COR-Corrosive; CS-Cancer Suspect Agent; EST-Estimated; HMIS-Hazardous Material Identification System; NA-Not Applicable; ND-No Data; NE – Data Not Established; OX- Oxidizer; PEL-Permissible Exposure Limit; PPI-Personal Protection Index; STEL-Short Time Exposure Limit; TLV-Threshold Limit Value; TS-Trade Secret; TWA-Time Weighted Average

.ADDENDUM: PRO-SAN®- L kills 99.999% of a broad spectrum of both gram positive and gram negative bacteria in \*30 seconds! Also kills antibiotic resistant bacteria! Aeromonas hydrophila, Escherichia coli O157:H7, Listeria monocytogenes, Pseudomonas aeruginosa, Salmonella typhimurium, Shigella sonnei, Vibrio cholerae, Yersinia enterocolitica.
\* (Evaluated by the AOAC suspension test).

\*\* COMPARISON OF MICROBICIDAL EFFICIENCY OF PRO-SAN AND HYPOCHLORITE ( BLEACH ) ( 99.999% KILL IN 30 SECONDS )

page 8

TEST BACTERIA	PRO-SAN	HYPOCHLORITE ( BLEACH ) 50 ppm
Aeromonas hydrophila (ATCC 7965 )	PASS	PASS
Escherichia coli 0157 : H7	PASS	PASS

Listeria monocytogenes ( ATCC 7644 )	PASS	FAIL
Pseudomonas aeruginosa ( ATCC 10145 )	PASS	FAIL
Salmonella typhimurium ( ATCC 7823 )	PASS	FAIL
Shigella sonnei ( ATCC 9290 )	PASS	PASS
Vibrio cholerae ( ATCC 9458 )	PASS	FAIL
Yersinia enterocolitica ( ATCC 23715 )	PASS	FAIL

<sup>\*\*</sup> Tested using the in-vitro suspension test ( essentially by the A.O.A.C. Germicidal and Detergent Sanitizer Test as modified by Lopes 1986 ( J. Dairy Science, 69:2791-96 ) . CLOROX® was used as the source of available " CI " ( hypochlorite ) The test interprets lethal activity greater than 99.999% as PASS and less than 99.999% as FAIL .