



The Original Green

CA DIN 02209756 / US EPA 70467-3 / CH BAG#CHZB0163 / DE BAUA N-24586 / FDA D142277

Hard Surface Disinfectant – One Step

Contact Time < 1 Minute (less than)

Intermediate Level – Tuberculocidal, Bactericidal, Virucidal & Fungicidal in the presence of Bioburden

Colour: Green | Scent: Lime, Mango, Pepper

Protocol

Available Sizes:

60 mL Travel Sprayer (case of 10) (01-SURF-060)

710 mL Spray Bottle (case of 4) (01-SURF-704)

5 L EcoPACK (01-SURF-005)

LeCLOTH™ Dry Wipes (Case of 300 Sheets 229 x 229mm/ 9"x9") (04-LCWR-300)

Purpose:

BioSURF™ provides fast effective disinfection in the presence of bioburden, while minimizing the impact on the Environment, People and Equipment.

Suitable for:

Hard surfaces, kennels and other veterinary devices, medical devices, instruments and prothesis including dental impressions.

Effective for cleaning and remediation of moulds and biofilms. Bacteriostatic when diluted in solutions like pumice.

Applied Asepsis Concepts:

Micrylium has a product development strategy based on what we call "Chair Theory". The four legs of a chair give it balance. Most products do not have this balance.

They may be one minute kill on TB, but 15 minutes on Polio. The chair legs concepts in Microbiology are Mycobacteria, non-enveloped viruses, fungal spores and gram negative bacteria. Our kill times are measured as the longest time to cover all benchmarks. BioSURF™ disinfects effectively in heavy blood/saliva and protein environments.

Halogens (Cl, Br, I), Quaternary Ammoniums and Peroxides are reactive with proteins limiting their ability to perform in many clinical settings.

Quality Commitment:

Our vision of asepsis holistically links the patient/client safety with the safety of professional staff. Our chemistry is based on antiseptics of pharma grade (USP EP BP NF) origin.

Quality ingredients include biodegradable surfactants (many of which are plant based), USP grain derived absolute Ethanol and naturally derived scents. OECD 301D Tests conclude biodegradability (28 days). Our EcoPACK™ concept delivers fresh product (no Oxidation) and is fully recyclable. (EVOH bag/Recycled Corrugated Box)

Instructions for Use:

1) Surface Spray - remove trigger from BioSURF™ spray bottle and dispense BioSURF™ into the bottle from the EcoPACK™ spigot. Replace trigger. Spray BioSURF™ lightly as a mist over surfaces to be disinfected. Wait one minute then wipe thoroughly with LeCLOTH™ or disposable paper towel. Micrylium recommends using LeCLOTH™ biodegradable sheet for ethanol disinfectants – 229 x 229 mm (9"x9").

2) Surface Wipe Options - Create your own wet wipes (Recommended amount 8-10mL)

a.) Carefully dispense BioSURF™ from the EcoPACK™ spigot directly onto a LeCLOTH™ sheet.

b.) BioSURF™ solution can be sprayed from the sprayer directly onto the sheet.

c.) Fold a LeCLOTH™ sheet and place in a small bowl or a measuring cup. Dispense BioSURF™ (8-10mL per wipe) from the EcoPACK™ spigot.

Wipe surface thoroughly until wet. Let sit for one minute.

Clinicians Report: <https://www.cliniciansreport.org/uploads/files/1765/BioSURF-course-HO.pdf>

Protocol for disinfection in the presence of visible body fluid from known Infectious host.

Rella Christensen's technique: Wet LeCLOTH™ wipe with BioSURF™ solution. Wipe back and forth, then back and forth at 90°.

Let sit for 3 minutes. Repeat procedure for another 3 minutes.



Caution: Use with care as the product is Flammable



Precautions:

USE FULL STRENGTH – Do Not Dilute. RTU (Ready To Use Formulation)

Do not use on surfaces that undergo rapid temperature changes.

AVOID CONCURRENT USE WITH BLEACH - Staining (yellow/brown) can occur. On some surfaces, including uniforms, this can be removed by soaking with Borax (Sodium Borate).

CAUTION - NOT FOR USE on acrylic latex painted surfaces or vinyl upholstery.

Avoid longer than 10 minutes contact time with rubber or silicone materials.

Helpful Tips:

Pre-cleaning can spread bacterial contamination. BioSURF™ contains surfactants/detergents that clean and penetrate microbial contamination in one step. If your protocol requires two step cleaning & disinfection (or there is visible bioburden), use BioSURF™ for both steps to minimize risk to staff and reduce the risk of vector transmission.

With frequent use some residue may accumulate. BioSURF™ contains surfactants and although harmless, this residue should be removed weekly with a water moistened LeCLOTH™ or microfiber towel. See our website for specific details: www.micrylium.com/products



Revision Date: Nov 27, 2023 v2.0



1. IDENTIFICATION									
Product Name		BioSURF		Manufacturer		Micrylium Laboratories Inc.			
Registration		CAN DIN		02209756		Address		5000M Dufferin Street, Toronto, Canada, M3H 5T5 www.micrylium.com	
		US EPA		70467-3					
		US FDA		D142277					
		CH BAG		CHZB0163					
Indication		Hospital hard surface disinfectant				Phone		416-667-7040	
Emergency Phone #		CHEMTREC		1-800-424-9300		Fax		416-667-0071	
						CANUTEC		1-613-996-6666	
2. HAZARD IDENTIFICATION									
Symbol Pictogram						Signal Word		Warning	
						Symbol		Flame	
Hazard Classification		Flammable Liquid Category 3							
Health Hazard		Use Care (See Precautionary and Hazard Statements)				Environmental Hazards		Biodegradeable (OECD 301D)	
Precautionary & Hazard Statements		P102: Keep out of reach of children. P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. P301: IF SWALLOWED: Drink large quantities of water or milk. P305: IF IN EYES: Flush eyes with large quantities of water. H226: Flammable liquid and vapour. H302: Harmful if swallowed. H317: May cause an allergic skin reaction. H336: May cause drowsiness or dizziness.							
3. COMPOSITION									
Chemical			CAS #		LD-50 (Oral, mg/kg) - Rat		Concentration (%)		
Ethanol			64-17-5		7,060		70.0%		
Chlorhexidine Gluconate			18472-51-0		2,000		0.2%		
4. FIRST AID MEASURES									
Inhalation		If breathing is difficult, remove individual to fresh air.				Ingestion		Drink large quantities of milk or water. Do not induce vomiting.	
Skin Contact		May cause dryness or irritation with prolonged contact.				Eye Contact		Flush with plenty of water.	
Most Important Symptoms and Effects (Acute and Delayed)									
May cause acute mild drowsiness, respiratory and/or eye irritation.									
Indication of any Immediate Medical Attention and Special Treatment Needed									
Not Applicable.									
5. FIREFIGHTING MEASURES									
Use dry chemical, foam, or CO ₂ . Use water spray to disperse vapours if needed. Firefighters: As with any fire, wear self-contained breathing apparatus.									
6. ACCIDENTAL RELEASE									
Use all means to prevent spillage. No other specific measures are necessary, provided vapours are not permitted to build up.									
7. HANDLING & STORAGE									
Store in a cool, dry, well-ventilated location. Keep away from heat, sparks and flames. DO NOT mix with bleach or peroxides. Storage and Transport: 0° - 30°C									
8. EXPOSURE CONTROLS/ PERSONAL PROTECTION									
Respiratory protective equipment may be required if vapours are not permitted to escape. No other specific measures required.									
Component		ACGIH TLV		OSHA PEL		NIOSH		CCHOS	
Ethanol		STEL: 1000 ppm		(Vacated) TWA: 1000 ppm (Vacated) TWA: 1900 mg/m ³		IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m ³		TWA: 1000 ppm TWA: 1900 mg/m ³	
9. PHYSICAL AND CHEMICAL PROPERTIES									
Physical State		Colour	Odour	Solidification point	Boiling point OECD 103	Flash Point ASTM D56	Density g/ml@ 25°C	pH	Kinematic Viscosity@ 23°C
Transparent, Liquid		Green	Lime, Pepper, Mango	-25°C	79°C	23°C	.862	9.5	2.43 mm ² /s
10. STABILITY AND REACTIVITY									
Stable under normal conditions. Incompatibility: Strong oxidants, acid chlorides, silver salts Decomposition: Products: CO ₂ , CO									
11. TOXICOLOGICAL DATA									
Acute Dermal Toxicity		LD ₅₀ >5000 mg/kg Not found to be dermal sensitizer				Acute Oral		LD ₅₀ >5000 mg/kg	
Ocular Irritation		0.0 severity after 7 days				Acute Inhalation Toxicity		LC ₅₀ : 2.3 mg/L Rat	
Reproductive Hazards		Ingestion/inhalation can be harmful. (TDLo 300mg/Kg Ethanol)				Carcinogenicity		Ingestion of Ethanol IARC Group1.	
Tests Performed by Product Safety Labs, Dayton, NJ USA									
12. ECOLOGICAL INFORMATION									
Surfactants are readily biodegradable in soil and water. Persistence unlikely based on available data.									
Ethanol		EC50 (72h) = 275 mg/L (Chlorella vulgaris)		Fathead minnow (Pimephales promelas) LC50 = 14200 Mg/L/96h		Photobacterium Phosphoreum:EC50 = 34634 Mg/L/30 min Photobacterium Phosphoreum:EC50 = 35470 Mg/L/5 min		EC50 = 9268 mg/L/48h EC50 = 10800 mg/L/24h	
13. DISPOSAL CONSIDERATIONS									
Domestic. Dilute 4:1 with water. This product is flammable.									
14. TRANSPORT INFORMATION									
Emergency Response Guide #127									
		Land			Sea			Air (IATA)	
		Hazard Class 3			Hazard Class 3			Hazard Class 3	
		UN 1170 Packaging Group III			UN 1170 Packaging Group III			UN 1170 Packaging Group III	
		Limited Quantity 5L 		Limited Quantity 5L 		Limited Quantity 1L 			
15. REGULATORY INFORMATION									
TSCA – No reporting required.					CERCLA – No hazardous pollutants or ozone depletion.				
16. OTHER INFORMATION									
The information and recommendations contained herein are based on information believed to be correct. It is offered in good faith, without guarantee. Micrylium Laboratories Inc. make no warranty expressed or implied.									
Effective Date: 2022/05/22				Revision Date: 2025/08/05				Document: SURF 1.7	