



BioSURF



- ✓ Cleans
- ✓ Disinfects
- ✓ Non-Toxic



ONE-STEP HARD SURFACE DISINFECTANT

BioSURF is the world's fastest one step ready-to-use, broad-spectrum, hospital level surface disinfectant. Unlike most disinfectants that can take up to 10 minutes to clean and disinfect, BioSURF works within 50 seconds. BioSURF is the perfect choice for rapid disinfection of counters, trays, impressions, medical devices, metal instruments and other hard surfaces. Lime and mango scented.



DIN 02209756

VIRUCIDAL • BACTERICIDAL • FUNGICIDAL • TUBERCULOCIDAL

FASTER



ONE-STEP Disinfection

Clean & disinfect in one step enabling quicker turn around times and less product wastage



1 Minute Contact Time

Fast broad spectrum surface disinfectant kill time across all four pathogen categories allows for faster client turnaround time



Broad Spectrum Disinfectant

Effective against TB, HBV, HCV, HIV, STAPH, COVID-19, MRSA, Fungi & more

SAFER



Hard Surfaces

Removes and disinfects blood, proteins, lipids, waxes, oils, inks and dyes off hard surfaces. Will not corrode, stain or rust metal.



Porous Surfaces

Designed to penetrate porous surfaces for maximum effectiveness. Effective against mature pellicle colonies (biofilm) of *Pseudomonas* sp.



Safe for Users

Does not contain quats, phenols, peroxides or aldehydes. Is a non-toxic disinfectant made from plant-based ingredients. No PPE necessary.

KINDER



Environmentally Friendly

All products are made with biodegradable, plant-based ingredients



Certified Biodegradable

All ingredients are certified USP Pharma grade and/or food grade quality



Recyclable Packaging

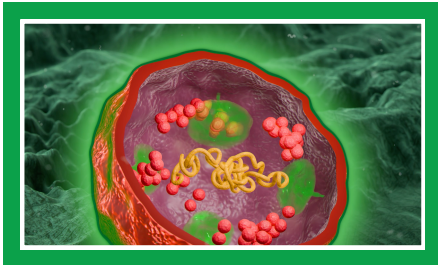
Bag-in-Box and spray bottles are designed to be environmentally friendly



ONE-STEP

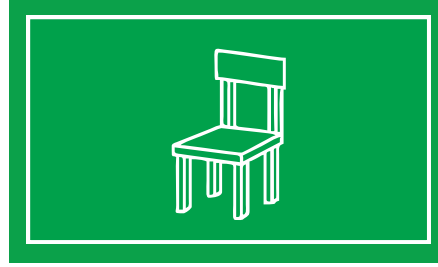
HARD SURFACE DISINFECTANT

THE SURFOL



SurfOL, Micrylium's proprietary surfactant, eliminates the air between the disinfectant and the surface to be cleaned. This allows for the immediate contact of the disinfectant and the flattened pathogen. **The result is a faster kill time.**

THE CHAIR THEORY



Micrylium's product development strategy is based on **"The Chair Theory"**. The four legs of the chair, which keep it balanced, are the four major categories of pathogens. The kill times advertised on competitor products reflect the pathogens with the fastest results. For example; competitors may achieve a 1-minute kill on TB and 15 minutes on Polio-virus but advertise only 1-minute. **We advertise a kill time that balances the kill rates of all 4 pathogens.**

WHY ONE-STEP?



Precleaning only spreads bacterial contamination. BioSURF contains special surfactant/detergents that clean, penetrate and disinfect microbial contamination. If your protocol insists on two step cleaning and disinfection (or there is a large body fluid spill) use BioSURF for both steps to minimize harm to staff and reduce the risk of vector transmission.

HOW TO USE

SURFACE SPRAY STEP-BY-STEP

1



Remove trigger from BioSURF™ spray bottle and dispense BioSURF™ into the bottle from the EcoPACK™ spigot. Replace trigger.

2



Spray BioSURF™ lightly as a mist over surfaces to be disinfected.

3



Wait 1 minute and then wipe thoroughly with LeCLOTH™ or disposable paper towel.

SURFACE WIPE STEP-BY-STEP

1



To create your own wet wipes (Recommended amount 8-10mL), carefully dispense BioSURF from the EcoPACK™ spigot directly onto LeCLOTH™ sheet.

2



BioSURF™ solution can also be sprayed from spray bottle directly onto a LeCLOTH™ sheet.

3



You can also fold a LeCLOTH™ sheet and place in a small bowl or measuring cup. Dispense BioSURF™ (8-10mL per wipe) from EcoPACK™ spigot. Wipe thoroughly and let sit for 1 minute.

PRODUCT SPECIFICATION DATA

Item Number	Product Description	Packaging
01-SURF-060	BioSURF 60mL Mini Spray Bottle RTU	Case of 10
01-SURF-704	BioSURF 710mL Spray Bottle RTU	Case of 4
01-SURF-001	BioSURF 1L Bag-in-Box RTU	1 Box
01-SURF-005	BioSURF 5L Bag-in-Box RTU	1 Box



BSCA4.31.10.25





CONTACT TIME

Pathogen Type	Strain	Effective Contact Time
Bacteria	Salmonella choleraesuis (ACC 10708)	10 seconds
Bacteria	Staphylococcus aureus (ATCC 6538)	10 seconds
Bacteria	Pseudomonas aeruginosa (ATCC 15442) (10% soil)	20 seconds
Bacteria	Escherichia coli (NCTC 10541) (6.2% soil)	20 seconds
Bacteria	Enterococcus hirae (ATCC 10541) (6.2% soil)	50 seconds
Bacteria	Proteus mirabilis (ATCC 14153) (6.2% soil)	50 seconds
Mycobacterium	Mycobacterium bovis BCG(5% soil/bioburden)	50 seconds
Mycobacterium	Mycobacterium terrae (ATTC 15755) (4.6% soil)	50 seconds
Mycobacterium	Mycobacterium smegmatis (*Tuberculocidal activity) (PN 1034)	60 seconds
Virus	Coronavirus 2 (SARS-CoV-2)	10 seconds
Virus	Coronavirus 19 (SARS-CoV-19)	10 seconds
Virus	Human Immunodeficiency Virus Type1 HTLV-111	20 seconds
Virus	Adenovirus Type 5	30 seconds
Virus	Canine Parvovirus CPV-265 (5% soil)	50 seconds
Virus	Hepatitis B Virus (HBV) Duckling Test (100% blood)	50 seconds
Fungi	Trichophyton menhingi (ATCC 12106) (10% soil)	20 seconds
Fungi	Candida albicans (ATCC 10231) (6.2% soil)	50 seconds
Fungal Spores	Trichophyton mentagrophytes (ATCC 9533)	10 seconds

Note: Initial Formulation Batch (aged 60 days) tested on 60 replicates as indicated in AOAC method 955.15 for confidence level of 95%.
Each Production Batch is tested with 10 replicates (0% failure) to monitor ongoing quality control specifications for each product.
* Testing performed at Nucro-Technics Laboratory, 2000 Ellesmere Road, Unit 16 Scarborough, Ontario
All other tests performed at Micrylium Laboratories, 117 Dolomite Drive, North York, Ontario

INDEPENDENT TEST RESULTS

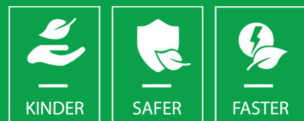
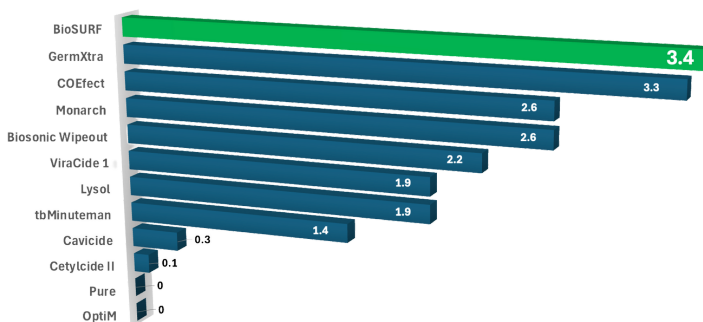
“After 40+ years of a worldwide search that includes extensive microbial testing of now 190+ products, one has finally met the necessary essentials in all three surface disinfectant components - **BioSURF™**.”



Dr. Gordon J. Christensen, DDS, MSD, PhD



Log Reduction Report
Surface Disinfectant Effectiveness
Clinicians Report Volume 10 Issue 10



1. IDENTIFICATION											
Product Name Registration		BioSURF		Manufacturer		Micrylium Laboratories Inc.					
		CAN DIN	02209756	Address		5000M Dufferin Street, Toronto, Canada, M3H 5T5 www.micrylium.com					
		US EPA	70467-3								
		US FDA	D142277								
	CH BAG	CHZB0163			Phone		416-667-7040				
Indication		Hospital hard surface disinfectant		Fax		416-667-0071					
Emergency Phone #		CHEMTREC		1-800-424-9300		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 2,000		70.0%			
		Chlorhexidine Gluconate		18472-51-0				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/m3		IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m3		TWA: 1000 ppm TWA: 1900 mg/m3			
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 mm²/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			HazardClass 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: 2025/10/31								Document: SURF 2.0			