

# BioSURF™


**1 MINUTE**  
 CONTACT TIME

## FASTEST 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.



#### Safer 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

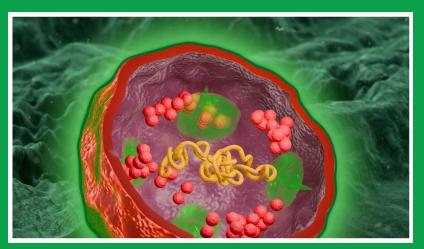
Bag-in-Box and spray bottles are designed to be environmentally friendly.



# FASTEAST ONE-STEP

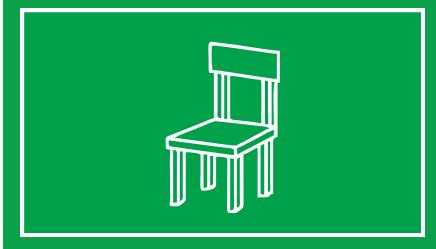
## HARD SURFACE DISINFECTANT

### 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 Poliovirus 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



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.

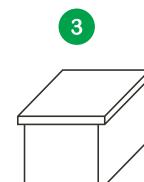
### WHERE TO USE



1 Trays



2 Tools, Instruments & Impressions



3 Hard-Surface Countertops

### 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





# FASTESt ONE-STEP HARD SURFACE DISINFECTANT

## 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 menghini (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 Nuco-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

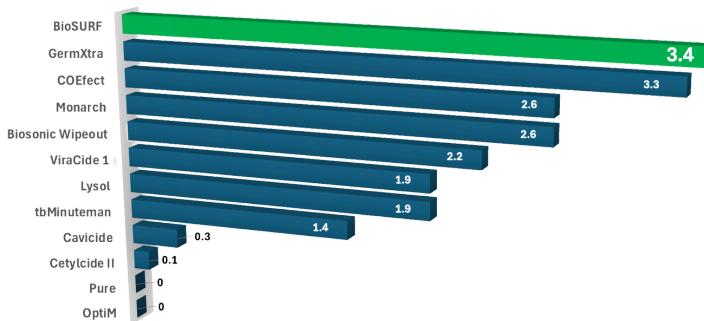


“After 40+ years of a worldwide search that includes extensive microbial testing of now 190+ products, one has finally met the necessary essentials in all three surface disinfectant components - **BioSURF™**.”

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



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



Kill potential within 3 minutes of 12 surface disinfectants on poliovirus 1 in the presence of 10% fresh human whole blood. Generally, if a chemical kills 3 log<sub>10</sub> (99.9%) of a million organism challenge, it can claim disinfection. Only BioSURF™ Bag-in-a-Box and GermXtra from a freshly opened container killed poliovirus1 in the presence of 10% fresh human whole blood within 3 minutes.



# BioSURF™ SDS

1. IDENTIFICATION										
Product Name <b>Registration</b>	BioSURF™		Manufacturer <b>Address</b>	Micrylium Laboratories Inc. 5000M Dufferin Street, Toronto, Canada, M3H 5T5 www.micrylium.com						
	CAN DIN	02209756		416-667-7040						
	US EPA	70467-3		416-667-0071						
	US FDA	D142277		<b>CANUTEC</b> 1-613-996-6666						
CH BAG		CHZB0163								
Indication		Hospital hard surface disinfectant		Phone	416-667-7040					
				Fax	416-667-0071					
Emergency Phone #		CHEMTREC		1-800-424-9300						
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		<b>P102:</b> Keep out of reach of children. <b>P210:</b> Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. <b>P301:</b> IF SWALLOWED: Drink large quantities of water or milk. <b>P305:</b> IF IN EYES: Flush eyes with large quantities of water.								
		<b>H226:</b> Flammable liquid and vapour. <b>H302:</b> Harmful if swallowed. <b>H317:</b> May cause an allergic skin reaction. <b>H336:</b> 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 <sub>2</sub> . Use water spray to disperse vapours if needed. <b>Firefighters:</b> 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 <sup>3</sup>	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>						
9. PHYSICAL AND CHEMICAL PROPERTIES										
Physical State	Colour	Odour	Solidification point	Boiling point OECD 103	Flash Point ASTM D56					
Transparent, Liquid	Green	Lime, Pepper, Mango	-25°C	79°C	23°C					
Density g/ml @ 25°C										
.862										
pH										
9.5										
Kinematic Viscosity @ 23°C										
2.43 mm <sup>2</sup> /s										
10. STABILITY AND REACTIVITY										
Stable under normal conditions. <b>Incompatibility:</b> Strong oxidants, acid chlorides, silver salts <b>Decomposition:</b> Products: CO <sub>2</sub> , CO										
11. TOXICOLOGICAL DATA										
Acute Dermal Toxicity	LD <sub>50</sub> >5000 mg/kg Not found to be dermal sensitizer			Acute Oral	LD <sub>50</sub> >5000 mg/kg					
Ocular Irritation	0.0 severity after 7 days			Acute Inhalation Toxicity	LC <sub>50</sub> : 2.3 mg/L Rat					
Reproductive Hazards	Ingestion/inhalation can be harmful. (TDLo 300mg/Kg Ethanol)			Carcinogenicity	Ingestion of Ethanol IARC Group 1.					
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:2025/10/31			Document: SURF 2.0							