



## Got A Minute?

CA DIN 02210711 / FDA D142278

### Immersion Disinfectant

Contact Time < 1 Minute (less than)

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

Colour: Orange | Scent: Orange, Peppermint, Eucalyptus

#### Available Sizes:

1 L EcoPACK (02-MERS-001)

5 L EcoPACK (02-MERS-005)

#### Purpose:

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

#### Suitable for:

Aseptic transport and immersion of medical devices and instruments. As per IPAC best practices, BioMERS™ provides protection from adhesion of bioburden. Bacteriostatic when diluted in solution 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. BioMERS™ 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) Carefully dispense BioMERS™ from the EcoPAK™ spigot into an instrument bath or covered container. Keep bath covered to prevent evaporation.
- 2) Immerse objects (Glass, Metal or Plastic) and Instruments (mixed metals) for a minimum of 1 minute. For plastics, silicone and acrylic a maximum of 10 minutes immersion is recommended. Stainless steel instruments can be left for up to 5 days in a closed bath or container.
- 3) BioMERS™ may be used chairside/bedside as a pre-soak for instruments to reduce risk prior to transporting them to the sterilization area.
- 4) BioMERS™ may also be used on heavily soiled devices or devices which have been contaminated with inks or oils to clean them prior to sterilization. Using BioMERS™ before sterilization can reduce the risk of cross contamination. Rinse with distilled or deionized water and dry before sterilization.
- 5) BioMERS™ can be used for disinfecting jewelery, dentures, hearing aids, mouth-guards and splints.

#### 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:

Steam sterilization with regular validation and maintenance are the correct treatment for Medical Devices and Instruments requiring sterilization.

Best practice is Class B vacuum sterilization. Always rinse devices/tools and dry prior to placing in BioMERS™ to prevent dilution. Prior to sterilization, rinse and dry instruments. To ensure that the solution contains the appropriate amount of active ingredient (ethanol) use a Hydrometer. The reading should be .867 (+ - .02 at 20°)

See our website for specific details: [www.micrylium.com/products](http://www.micrylium.com/products)



Revision Date: Dec 15, 2023 v2.0



KINDER



SAFER



FASTER



1. IDENTIFICATION									
<b>Product Name</b>		BioMERS		<b>Manufacturer</b>		Micyrium Laboratories Inc.			
<b>Registration</b>		CAN DIN	02210711	<b>Address</b>		5000M Dufferin Street, Toronto, Canada, M3H 5T5 www.micyrium.com			
		US FDA	D142278						
<b>Indication</b>		Immersion disinfectant / cleaner			<b>Phone</b>		416-667-7040		
<b>Emergency Phone #</b>		CHEMTREC			<b>Fax</b>		416-667-0071		
					1-800-424-9300		CANUTEC	1-613-996-6666	
2. HAZARD IDENTIFICATION									
<b>Symbol Pictogram</b>					<b>Signal Word</b>		Warning		
					<b>Symbol</b>		Flame		
<b>Hazard Classification</b>		Flammable Liquid Category 3							
<b>Health Hazard</b>		Use Care (See Precautionary and Hazard Statements)				<b>Environmental Hazards</b>		Biodegradeable ( OECD 301D)	
<b>Precautionary &amp; Hazard Statements</b>		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									
<b>Chemical</b>		<b>CAS #</b>		<b>LD-50 (Oral, mg/kg) - Rat</b>		<b>Concentration (%)</b>			
Ethanol		64-17-5		7,060		70.0%			
Chlorhexidine Gluconate		18472-51-0		2,000		0.2%			
4. FIRST AID MEASURES									
<b>Inhalation</b>		If breathing is difficult, remove individual to fresh air.			<b>Ingestion</b>		Drink large quantities of milk or water. Do not induce vomiting.		
<b>Skin Contact</b>		May cause dryness or irritation with prolonged contact.			<b>Eye Contact</b>		Flush with plenty of water.		
<b>Most Important Symptoms and Effects (Acute and Delayed)</b>									
May cause acute mild drowsiness, respiratory and/or eye irritation.									
<b>Indication of any Immediate Medical Attention and Special Treatment Needed</b>									
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.									
<b>Component</b>		<b>ACGIH TLV</b>		<b>OSHA PEL</b>		<b>NIOSH</b>		<b>CCHOS</b>	
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									
<b>Physical State</b>	<b>Colour</b>	<b>Odour</b>		<b>Solidification point</b>	<b>Boiling point OECD 103</b>	<b>Flash Point ASTM D56</b>	<b>Density g/ml@ 25°C</b>	<b>pH</b>	<b>Kinematic Viscosity@ 23°C</b>
Transparent, Liquid	Orange	Orange, Peppermint, Eucalyptus		-25°C	81°C	23°C	.864	9.5	2.24 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									
<b>Acute Dermal Toxicity</b>		LD <sub>50</sub> >5000 mg/kg Not found to be dermal sensitizer			<b>Acute Oral</b>		LD <sub>50</sub> >5000 mg/kg		
<b>Ocular Irritation</b>		0.0 severity after 7 days			<b>Acute Inhalation Toxicity</b>		LC <sub>50</sub> : 2.3 mg/L Rat		
<b>Reproductive Hazards</b>		Ingestion/inhalation can be harmful. (TDLo 300mg/Kg Ethanol)			<b>Carcinogenicity</b>		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									
	<b>Land</b>			<b>Sea</b>			<b>Air (IATA)</b>		
	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. Micyrium Laboratories Inc. make no warranty expressed or implied.									
Effective Date: 2022/05/23			Revision Date: 2025/08/05			Document: MERS 1.7			