



BioVAC™

CONCENTRATED ENZYMATIC EVACUATION CLEANER

BioVAC™ is an ultra-concentrated controlled foam detergent used to clean suctions, evacuation systems, cuspidors, pumice trays and plaster traps that encounter body fluids in clinical situations. This unique formula contains four enzymes that rapidly break down bioburden. The formula has a special low foaming surfactant blend that ensures excellent cleaning action without overflow. With a lower pH potential and lubricating additives, pumps and impellers are protected from corrosion and wear.



DIN 02209659

BACTERICIDAL & FUNGICIDAL

FASTER



2x Concentrated

1:40 Dilution liquid mixes instantly.
Easy storage with concentrated formula.



Daily Usage

BioVAC™ is indicated as a daily use product, however, it may be used after each patient if concerns exist.



Contact Time

Effective against Bacterial and Fungal pathogens with a 5 minute contact time.

SAFER



Enzymatic Cleaner

BioVAC™'s four Enzyme formula destroys body fluids and proteins rapidly. Special chelating agents trap heavy metals such as Mercury.



Non-Corrosive

Will not corrode metals, including brass and all types of plumbing materials, stainless steel and aluminum.



Safer for Users

Protects staff from tubing generated aerosols of toxic chemicals and cross-contamination when solutions are circulating through traps or filters.

KINDER



Environmentally Friendly

All products are made with plant-based biodegradable ingredients.



Certified Biodegradable

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



Complies with Regulations

Contains natural source biodegradable surfactants and complies with all sewer regulations.





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SAFER ENVIRONMENT



Odours from system traps are caused by **bio-burden bacterial growth**. Reduce the bacterial count by flushing with BioVAC™ on a regular basis. This will reduce the risk of absorbing harmful/toxic fumes and make for a safer work environment.

SUCK-BACK



Back-flow occurs when a saliva ejector sticks to the inside of the mouth. This causes the **potential risk of evacuation back-flow** into the patient's mouth. Using BioVAC™ regularly to clean your suction is a necessary disinfection protocol.

CONTROLLED FOAMING



BioVAC™ is a "controlled-foam" product. Excessive foaming will not occur when directions are followed. It is **non-corrosive** and will not damage suction equipment. For use in circulating foot baths and tubing, use same dilution and maintain contact time (More than 5 minutes). Use leftover solution in drains or plaster sinks to reduce unpleasant odours. BioVAC™ remains effective after mixing and can be stored for up to 60 days.

HOW TO USE

MEDICAL/DENTAL SUCTION SYSTEMS STEP-BY-STEP			
1	2	3	4
For suction and pump systems, dispense 50mL of BioVAC™ into a measuring cup. Add 2 L of warm water in a mixing container (1 part BioVAC™ to 40 parts water).	Put high volume evacuation and saliva ejector into a cup (250mL) of diluted BioVAC™ (use only one cup of solution per line).	Turn on for 2-3 seconds (draw maximum 250mL of solution through each system line), then turn off while tip is submerged in the liquid. Let stand overnight.	BioVAC™ is recommended to be used after each patient.
PUMP-CIRCULATION SYSTEM STEP-BY-STEP			
1	2		
Dilution Ratio 1:100 Dilute 10mL of BioVAC™ for every litre of water to clean and refresh pump/bath systems in Agriculture.	Dilution Ratio 1:100 For use in tubing use 10mL of BioVAC™ for every litre of water and circulate for at least 5 minutes.		

PRODUCT SPECIFICATION DATA

Item Number	Product Description	Packaging
03-VAC2-001	BioVAC™ 1L Bag-in-Box	1 Box
03-VAC2-005	BioVAC™ 5L Bag-in-Box	1 Box

CUSTOMER REVIEWS



"We disinfect with BioVAC™ after each patient. This ensures our suction system is always safe for our patients in the event there is ever suck-back during a procedure. Our patients' safety is our priority and BioVAC™ is the only product we trust."

Sarah J., Woodlawn Dental, British Columbia, Canada

BVCCA4.31.10.25



Manufactured By

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EVAC SOLUTION



Recycling is not always the safest concept when it comes to dental air. Often evacuation system drains are in small, closed rooms that are shared with an air compressor. The compressor draws air from the same area that has a pathogenic discharge from each patient. The **compressor then returns this contaminated air** to the clinic handpieces, syringes and scalers. Using BioVAC™ ensures the evacuated air is clean.

CLOSED-FLOW SYSTEMS



Recommended by leading Amalgam Separator manufacturers to reduce outflow/discharge. BioVAC™ is clinically proven to effectively clean and declog impellers in closed-flow systems.

COLOUR CHANGE



Depending on the storage conditions, the enzymes used to make BioVAC™ can consume the natural colouring from purple to clear. Our studies show that this phenomena has no effect on the antimicrobial ability of BioVAC™. It is only an aesthetic change.

CONTACT TIME

Pathogen Type	Strain	Effective Contact Time
Bacteria	Salmonella choleraesuis (ATCC 10708)	5 minutes
Bacteria	Pseudomonas aeruginosa (ATCC 15442)	5 minutes
Bacteria	Staphylococcus aureus (ATCC 6538)	5 minutes
Bacteria	Escherichia coli (NCTC 10541) (10% soil)	5 minutes
Fungi	Trichophyton mentagrophytes (ATCC 9533)	5 minutes
Fungi	Trichophyton menghini (ATCC 12106) (10% soil)	5 minutes

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



BioVAC™ SDS

1. IDENTIFICATION					
Product Name	BioVAC™	Manufacturer	Microlyium Laboratories Inc.		
Registration	CAN	Class I	5000M Dufferin Street, Toronto, Canada, M3H 5T5 www.microlyium.com		
	US FDA	D142280			
Indication	Enzymatic detergent concentrate	Phone	416-667-7040		
Emergency Phone #	CHEMTRIC	Fax	416-667-0071		
2. HAZARD IDENTIFICATION		1-800-424-9300	CANUTEC 1-613-996-6666		
Symbol Pictogram		Signal Word	Irritant		
		Symbol	Exclamation mark		
Hazard Classification	Not Applicable				
Health Hazard	No Serious Health Hazards	Environmental Hazards	Biodegradeable		
Precautionary & Hazard Statements	P102: Keep out of reach of children. P301: IF SWALLOWED: Drink large quantities of water or milk. P305: IF IN EYES: Flush eyes with large quantities of water.	H302: Harmful if swallowed. H317: May cause an allergic skin reaction. H320: Causes eye irritation.			
3. COMPOSITION					
Chemical	CAS #	LD-50 (Oral, mg/kg)	Concentration (%)		
Chlorhexidine Gluconate	18472-51-0	2,000 (Rat)	1.60%		
4. FIRST AID MEASURES					
Inhalation	If breathing is difficult, remove individual to fresh air.	Ingestion	Drink large quantities of milk or water to dilute. Do not induce vomiting.		
Skin Contact	If irritation occurs, rinse area thoroughly	Eye Contact	Flush with plenty of water for 20 minutes.		
Most Important Symptoms and Effects (Acute and Delayed)					
Not Applicable.					
Indication of any Immediate Medical Attention and Special Treatment Needed					
Not Applicable.					
5. FIREFIGHTING MEASURES					
Non-flammable.					
6. ACCIDENTAL RELEASE					
Use a paper towel to absorb and dispose with domestic garbage.					
7. HANDLING & STORAGE					
Store in a cool, dry, well-ventilated location. DO NOT mix with bleach or peroxides. Storage and Transport: 0°- 30°C					
8. EXPOSURE CONTROLS/ PERSONAL PROTECTION					
No specific measures required.					
9. PHYSICAL AND CHEMICAL PROPERTIES					
Physical State	Colour	Odour	Solidification point		
Transparent, Liquid	Purple	Blueberry	-8°C		
			Boiling point OECD 103		
			105°C		
			Flash Point		
			N/A		
			Density g/ml @ 25°C		
			1.05		
			pH		
			9.9		
			Kinematic Viscosity		
			80 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	Not found to be dermal sensitizer		Acute Oral		
	N/A		N/A		
Ocular Irritation	0.0 severity after 7 days		Acute Inhalation Toxicity		
	N/A		N/A		
Reproductive Hazards	None		Carcinogenicity		
	N/A		None		
12. ECOLOGICAL INFORMATION					
Surfactants are readily biodegradable in soil and water.					
13. DISPOSAL CONSIDERATIONS					
Domestic.					
14. TRANSPORT INFORMATION					
Not Applicable.					
N/A	Land		Sea		
	N/A		N/A		
	N/A		N/A		
	N/A		N/A		
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. Microlyium Laboratories Inc. make no warranty expressed or implied.					
Effective Date: 2025/10/31		Document: VAC 2.0			