



Microclean

**Disinfectant - Cleaner - Deodorizer
Detergent - *Virucide - Fungicide
(against Pathogenic fungi) - Mildewstat
(on hard, non-porous, inanimate surfaces)**

DESCRIPTION

Microclean is a phosphate-free formulation designed to provide effective cleaning, deodorizing and disinfection in hospitals, nursing homes, hotels, schools, food processing plants, restaurants, athletic/recreation facilities, sports stadiums, amphitheatres, convention centers and other institutions where house keeping is of prime importance in controlling cross-contamination from treated surfaces. Formulated with a soft lavender scent, pink colour and neutral pH, **Microclean** will not dull high-gloss floor finishes with repeated use. **Microclean**, when used as directed, is formulated to disinfect hard, non-porous, inanimate environmental surfaces such as floors, walls, metal surfaces, bathrooms, shower stalls, bathtubs, cabinets and artificial turf surfaces. For larger areas such as operating rooms and patient care facilities, this product is designed to provide both general cleaning and disinfecting.

Microclean deodorizes those areas which generally are hard to keep fresh smelling, such as garbage storage areas, empty garbage bins and cans, toilet bowls and other areas prone to odors caused by microorganisms. **Microclean** controls mold, mildew and the odors they cause on hard surfaces. **Microclean** is also an effective bactericide, fungicide and virucide in the presence of organic soil (5% blood serum). **Microclean** kills HIV-1 and HIV-2 (associated with AIDS) on pre-cleaned environmental surfaces previously soiled with blood or body fluids.

SPECIAL INFORMATION

Canadian DIN #: 02247845

Guarantee

Octyl decyl dimethyl ammonium chloride	3.225%
Dioctyl dimethyl ammonium chloride	1.628%
Didecyl dimethyl ammonium chloride	1.628%
Alkyl (50% C ₁₄ , 40% C ₁₂ , 10% C ₁₆) dimethyl benzyl ammonium chloride	4.339%

DIRECTIONS

Disinfection of hospitals, food processing establishments, dairies, restaurants and bars:
Dilute 8 ml of **Microclean** per litre of water. Before using **Microclean**, food products and packaging must be removed from the area and carefully protected. Apply this solution with a mop, cloth, sponge or trigger sprayer so as to wet all surfaces thoroughly. Allow to remain wet for a period of 10 minutes, then remove all excess liquid. Prepare a fresh solution for each use. All food processing surfaces require rinsing with potable water. For heavily soiled areas, a pre-cleaning step is required.

Disinfection of toilet bowls:

Remove gross filth or soils from surfaces with bowl brush. Add 8 mL of **Microclean** to the bowl water and brush or swab the bowl completely using a scrub brush or toilet mop, making sure to get under the rim. Let stand 10 minutes and flush.

Deodorization of garbage storage areas, empty garbage bins and cans and pet areas:

To deodorize, apply **Microclean** as indicated under the Disinfection heading.



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Fungicidal Activity:

At the 8 ml per litre dilution, **Microclean** demonstrates effective fungicidal activity against the pathogenic fungi *Trichophyton mentagrophytes* and *Candida albicans*.

Mildewstat:

To control mold and mildew (such as *Aspergillus niger*) and the odours they cause on pre-cleaned, hard, non-porous surfaces add 8 ml **Microclean** per litre of water. Apply solution with a cloth, mop or sponge making sure to wet all surfaces completely. Let air dry. Prepare a fresh solution for each use. Repeat application at weekly intervals or when mildew growth reappears.

Microclean KILLS HIV-1 AND HIV-2 ON PRE-CLEANED ENVIRONMENTAL SURFACES/OBJECTS PREVIOUSLY SOILED WITH BLOOD/BODY FLUIDS in health care settings (Hospitals, Nursing Homes) or other settings in which there is an expected likelihood of soiling of inanimate surfaces/objects with blood or body fluids, and in which the surfaces/objects likely to be soiled with blood or body fluids can be associated with the potential transmission of Human Immunodeficiency Virus Type 1 and Type 2 (HIV-1 and HIV-2).

Special Instructions for Cleaning and Decontamination against HIV-1 and HIV-2 on Surfaces/Objects Soiled with Blood or Body Fluids:

Personal Protection: When handling items soiled with blood or body fluids, use disposable latex gloves, gowns, masks, or eye coverings.

Cleaning Procedures: Blood or body fluids must be thoroughly cleaned from surfaces and objects before application of this product.

Contact Time/Dilution: at 8 mL per litre of water, **Microclean** is effective against HIV-1 and HIV-2 in the presence of 5% blood serum with a 10 minute contact time.

Disposal of Infectious Materials: Blood or other body fluids should be autoclaved and disposed of according to local regulations for infectious waste disposal.

Efficacy tests have demonstrated that this product is an effective Bactericide and Virucide in water up to 400 ppm hardness (as CaCO₃) in the presence of organic soil (5% blood serum). Efficacy tests have demonstrated that this product is an effective fungicide in water up to 200 ppm hardness (as CaCO₃) in the presence of organic soil (5% blood serum).

EFFICACY DATA

DISINFECTION DATA:

Test Method: AOAC Use Dilution

Test Conditions: 5% serum, 10 minute contact time, stainless steel carrier substrates, 400 ppm hard water, 20°C exposure temperature, 1 oz/US gallon dilution.

MATERIAL SAFETY DATA SHEET

SECTION 1 – PRODUCT/MANUFACTURER'S IDENTITY

Product Name: **MICROCLEAN** WHMIS CODE: N/A
 Product Use: *Cleaner disinfectant. (1:128)* Proper Shipping Name: N/A
Canada DIN 02247845 Hazard Class: N/A
 UN Number: N/A

HMIS	
3	Health
1	Flammability
0	Reactivity
B	Personal

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 1607 Derwent Way
 Delta, BC V3M 6K8, Canada
 Phone: (604) 526-5655

EMERGENCY PHONE
 Canada: Canutec 613-996-6666
 U.S.A.: Chemtrec 800-424-9300

A=Goggles, B=Goggles & Gloves
 C=Goggles, Gloves and Apron

ABBREVIATION KEY: N/A=Not Applicable, N/E=Not Established, N/D=Not Determined, > =Greater Than

SECTION 2 – HAZARDOUS INGREDIENTS INFORMATION

INGREDIENT	CAS NO.	RANGE %	PEL	TLV
Di-(C8-10)-Alkyl Dimethyl Ammonium Chlorides	68424-95-3	5.0-10.0	N/A	N/A
Alkyl Dimethyl Benzyl Ammonium Chlorides	68424-85-1	1.0-5.0	N/A	N/A
LD50 (oral rat) 426 mg/kg				
LC50 (rat) 20,000 ppm/10H				
ETHANOL	64-17-5	1.0-5.0	N/A	N/A
LD50 (oral rat) 7060 mg/kg				
LD50 (oral mouse) 919 mg/kg				
ALCOHOL ETHOXYLATE	68439-46-3	1.0-5.0	N/A	N/A
LD50 (oral rat) 1376 mg/kg				
LD50 (dermal rabbit) >2 g/kg				
Tetrasodium Salt of Ethylenediaminetetraacetic Acid	64-02-8	1.0-5.0	N/A	N/A
LD50 (oral rat) 3030 mg/kg				
LD50 (dermal rabbit) >5000 mg/kg				
LC50 >100 mg/L				

SECTION 3 – PHYSICAL DATA

Color and Odor: Clear pink, citrus/lavender scent. **Boiling Point:** 93.3°C **Vapor Pressure (mm HG):** N/D **pH:** 6.0 – 7.0
Physical State: Liquid. **Melting Point:** N/A **Vapor Density:** N/D **Specific Gravity:** 1.01 @ 20°C
Coef. Water/Oil Dist: Greater than 1.0 **Evaporation Rate:** N/D **Solubility in Water:** Soluble **Odor Threshold:** No Data

SECTION 4 – FIRE AND EXPLOSION HAZARD DATA

Flash Point and Method: > 93.3°C (PMCC) **Sensitivity to Mechanical Impact:** None. **Extinguishing Media:** Dry chemical, foam, carbon dioxide, water fog.
Flammable Limits: None known. **Sensitivity to Static Discharge:** None. **Auto ignition Temperature:** None known.
Conditions of Flammability: None.
Unusual Fire and Explosion Hazards: Vapors may form explosive mixture with air.
Hazardous Combustion Products: Irritating and toxic gases or fumes may be released during a fire.
Special Fire Fighting: Firefighters should wear full fire-fighting turn-out gear (full Bunker gear) including NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

SECTION 5 – REACTIVITY DATA

Chemical Stability: Stable under normal storage conditions. **Hazardous Polymerization:** Will not occur.
Incompatibility (material to avoid): Strong oxidizing and reducing agents, acids.
Hazardous Decomposition Products: Decomposition may produce oxides of carbon and nitrogen, ammonia vapors.

SECTION 6 – TOXICOLOGICAL DATA

Exposure Limits: See Section 2 under Hazardous Ingredient. **Routes of Entry:** Skin, eyes, inhalation.
Irritancy of Product: May be corrosive to skin and eyes. Irritating to respiratory system. **Carcinogenicity:** None known.
Sensitization: None known. **Mutagenicity:** None known.
Name of Toxicological Synergistic Product: None known. **Reproductive Toxicity:** None known.
Teratogenicity: None known.
Effects of Chronic Exposure: Prolonged or repeated exposure may cause skin irritation or dermatitis, respiratory disorder.
Effects of Acute Exposure to Product: Product exposure may irritate or cause burning sensation to skin and eyes. Inhaling vapors or mists may irritate mucous membranes. Prolonged inhalation exposure may cause headaches, nausea, etc. Ingestion may cause gastro-intestinal and abdominal discomfort.

SECTION 7 – PREVENTATIVE AND CONTROL MEASURES

Respiratory Protection: If product is misted or sprayed, or used in a confined area, use a NIOSH/MSHA approved dust/mist respirator.
Ventilation: Good general ventilation or local exhaust ventilation for spraying and misting in confined areas.
Protective Gloves: Natural or butyl rubber, nitrile or neoprene gloves.
Eye Protection: Chemical goggles, safety goggles or face shield.
Protective Clothing and Equipment: Long sleeve coveralls. Eye wash recommended in the immediate work area.
Storage and Handling Procedures: Use good industrial hygiene. Do not get in eyes. Avoid contact with skin and clothing. Avoid breathing sprays or mists. Store in a cool, dry place away from incompatibles. Keep container closed when not in use. Do not mix with any other chemicals. Store at temperatures below 30°C (86°F) and keep from freezing.
Disposal Procedures for Spills or Leaks: Wear protective equipment. Dike and contain large spills. Pump spills into an approved waste container. For small spills, soak up with a suitable absorbent such as clay, soil or commercially available absorbents, and then dispose of into an approved waste container. Keep away from sewers and out of natural waters.
Waste Disposal Method: Reuse if possible, or otherwise dispose recovered material in accordance with all local, Provincial or Federal Regulations.
Special Shipping Information: Store at temperatures below 30°C (86°F) and keep from freezing.

SECTION 8 – EMERGENCY FIRST AID PROCEDURES

First Aid:
 If swallowed, give plenty of clean water to drink to dilute product. Do not induce vomiting. Call a Physician. In case of contact with eyes, flush with clean water for 15 minutes. Get medical attention. For contact with skin, wash with clean water and rinse well. If irritation occurs or persists, get medical attention.

PREPARATION DATA

PREPARED BY: Technical Service / Regulatory Division PHONE: 604-526-5655 LAST UPDATE: 07/04/11
 THE INFORMATION PROVIDED IN THIS MATERIAL SAFETY DATA SHEET HAS BEEN OBTAINED FROM CURRENT SOURCES AND IS BELIEVED TO BE RELIABLE