

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

## DESCRIPTION

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

**Orderly** deodorizes those areas which generally are hard to keep fresh smelling, such as garbage cans, storage areas, empty garbage bins and cans, toilet bowls, and other areas prone to odors caused by microorganisms. **Orderly** controls mold, mildew and the odors they cause on hard surfaces. **Orderly** is also an effective bactericide, fungicide and virucide in the presence of organic soil (5% blood serum). **Orderly** 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 #: 02247847

### **Guarantee**

Octyl decyl dimethyl ammonium chloride	1.627%
Dioctyl dimethyl ammonium chloride	0.814%
Didecyl dimethyl ammonium chloride	0.814%
Alkyl (50% C <sub>14</sub> , 40% C <sub>12</sub> , 10% C <sub>16</sub> ) dimethyl benzyl ammonium chloride	2.170%

Canadian Food Inspection Agency (CFIA) Approval for use in Food Plants

## DIRECTIONS

### **Disinfection of hospitals, food processing establishments, dairies, restaurants and bars:**

Dilute 16 ml of **Orderly** per litre of water. Before using **Orderly**, 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 16 mL of **Orderly** 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.

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

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

***Fungicidal Activity:***

At the 16 ml per litre dilution, **Orderly** 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 16 ml **Orderly** 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.

**Orderly 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 a use dilution of 1 part per 64 parts water, **Orderly** 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 CaCO<sub>3</sub>) in the presence of organic soil (5% blood serum). Orderly is an effective fungicide in water up to 200 ppm hardness (as CaCO<sub>3</sub>) in the presence of organic soil (5% blood serum).**



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## 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, 2 oz/US gallon dilution.

### Results:

#### Test Organism

Sample      No. of Carriers  
Expose      Positive

<i>Staphylococcus aureus</i> (ATCC 6538)	A&B&C	60	1
<b><i>Salmonella choleraesuis</i> (ATCC 10708)</b>	<b>A&amp;B&amp;C</b>	<b>10</b>	<b>0</b>
<i>Pseudomonas aeruginosa</i> PRD-10(ATCC 15442)	A&B&C	60	0
<b><i>Bordetella bronchiseptica</i> (ATCC 31437)</b>	<b>A&amp;B</b>	<b>10</b>	<b>0</b>
<i>Corynebacterium ammoniagenes</i> (ATCC 6871)	A&B	10	0
<b><i>Enterobacter aerogenes</i> (ATCC 13048)</b>	<b>A&amp;B</b>	<b>10</b>	<b>0</b>
<i>Enterobacter cloacae</i> (ATCC 23355)	A&B	10	0
<b><i>Enterobacter cloacae</i> (clinical isolate)</b>	<b>A&amp;B</b>	<b>10</b>	<b>0</b>
<i>Enterococcus faecalis</i> (ATCC 19433)	A&B	10	0
<b><i>Enterococcus faecalis</i> (clinical isolate)</b>	<b>A&amp;B</b>	<b>10</b>	<b>0</b>
<i>Enterococcus faecalis</i> (Vancomycin Resistant) (VRE) (ATCC 51575)	A	10	0
	B	10	0
<b><i>Escherichia coli</i> (ATCC 11229)</b>	<b>A&amp;B</b>	<b>60</b>	<b>0</b>
<i>Escherichia coli</i> (clinical isolate)	A&B	60	0
<b><i>Fusobacterium necrophorum</i> (ATCC 27852)</b>	<b>A&amp;B</b>	<b>10</b>	<b>0</b>
<i>Klebsiella pneumoniae subsp. pneumonia</i> (ATCC 13883)	A	10	0
	B	10	0
<b><i>Lactobacillus casei subsp. rhamnosus</i> (ATCC 7469)</b>	<b>A</b>	<b>10</b>	<b>0</b>
	<b>B</b>	<b>10</b>	<b>0</b>
<i>Pasteurella multocida</i> (ATCC 7707)	A&B	10	0
<b><i>Proteus mirabilis</i> (ATCC 9921)</b>	<b>A&amp;B</b>	<b>10</b>	<b>0</b>
<i>Proteus mirabilis</i> (ATCC 25933)	A&B	10	0
<b><i>Proteus vulgaris</i> (ATCC 13315)</b>	<b>A&amp;B</b>	<b>10</b>	<b>0</b>
<i>Shigella dysenteriae</i> (ATCC 12180)	A&B	10	0
<b><i>Shigella flexneri Type 2b</i> (ATCC 12022)</b>	<b>A&amp;B</b>	<b>10</b>	<b>0</b>
<i>Shigella sonnei</i> (ATCC 25931)	A&B	10	0
<b><i>Salmonella enterica subsp. enterica serotype paratyphi B</i> (ATCC 8759)</b>	<b>A</b>	<b>10</b>	<b>0</b>
	<b>B</b>	<b>10</b>	<b>0</b>
Gentamicin resistant <i>Acinetobacter baumannii</i> (Fairfax Hospital CI 02001)	A	10	0
	B	10	0
Ciprofloxacin resistant <i>Acinetobacter baumannii</i> (Fairfax Hospital CI 02001)	A	10	0
	B	10	0

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**DISINFECTION DATA continued:**

**Results:**

<b>Test Organism</b>	<b>Sample</b>	<b>No. of Carriers</b>	
		<b>Exposed</b>	<b>Positive</b>
<i>Listeria monocytogenes</i> (ATCC 35152)	A&B	10	0
<b><i>Salmonella enteritidis</i></b>	<b>A&amp;B</b>	<b>10</b>	<b>0</b>
<i>Salmonella enterica</i> subsp.	A	10	0
<i>enterica</i> serotype <i>pullorum</i> (ATCC 9120)	B	10	0
<b><i>Salmonella enterica</i> subsp.</b>	<b>A</b>	<b>10</b>	<b>0</b>
<b><i>enterica</i> serotype <i>typhi</i> (ATCC 6539)</b>	<b>B</b>	<b>10</b>	<b>0</b>
<i>Salmonella enterica</i> subsp. <i>enterica</i>	A	10	0
<i>serotype typhimurium</i> (ATCC 14028)	B	10	0
<b><i>Serratia marcescens</i> (ATCC 8100)</b>	<b>A&amp;B</b>	<b>10</b>	<b>0</b>
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> (ATCC 33592)	A&B	60	0
<b><i>Staphylococcus aureus</i> (clinical isolate)</b>	<b>A&amp;B</b>	<b>60</b>	<b>0</b>
<i>Staphylococcus aureus</i>	A	10	0
(Methicillin Resistant) (MRSA) (ATCC 33592)	B	10	0
<b><i>Staphylococcus aureus</i> Vancomycin</b>	<b>A</b>	<b>10</b>	<b>0</b>
<b>Intermediate Resistant (VISA) (HIP 5863)</b>	<b>B</b>	<b>10</b>	<b>0</b>
<i>Staphylococcus epidermidis</i> (ATCC 29641)	A&B	10	0
<b><i>Staphylococcus epidermidis</i> (clinical isolate)</b>	<b>A&amp;B</b>	<b>10</b>	<b>0</b>
<i>Streptococcus pyogenes</i> Group A (ATCC 19615)	A&B	10	0
<b><i>Streptococcus pyogenes</i> (clinical-flesh</b>	<b>A</b>	<b>10</b>	<b>0</b>
<b>eating strain, BIRD M3)</b>	<b>B</b>	<b>10</b>	<b>0</b>
<i>Xanthamonas maltophilia</i> (clinical isolate)	A&B	10	0
<b>Community Associated Methicillin</b>	<b>A</b>	<b>10</b>	<b>0</b>
<b>Resistant <i>Staphylococcus aureus</i></b>	<b>B</b>	<b>10</b>	<b>0</b>
<b>(CA-MRSA) (NRS 123, Genotype (USA400)</b>	<b>C</b>	<b>10</b>	<b>0</b>
Community Associated Methicillin	A	10	0
Resistant <i>Staphylococcus aureus</i>	B	10	0
(CA-MRSA)(NRS 384, Genotype USA300)	C	10	0
<b>Cefazolin resistant <i>Acinetobacter</i></b>	<b>A</b>	<b>10</b>	<b>0</b>
<b><i>baumannii</i> (Fairfax Hospital CI 02001)</b>	<b>B</b>	<b>10</b>	<b>0</b>
Ceftriaxone resistant <i>Acinetobacter</i>	A	10	0
<i>baumannii</i> (Fairfax Hospital CI 02001)	B	10	0
<b>Tobramycin resistant <i>Acinetobacter</i></b>	<b>A</b>	<b>10</b>	<b>0</b>
<b><i>baumannii</i> (Fairfax Hospital CI 02001)</b>	<b>B</b>	<b>10</b>	<b>0</b>
Levofloxacin resistant <i>Acinetobacter</i>	A	10	0
<i>baumannii</i> (Fairfax Hospital CI 02001)	B	10	0
<b>Ampicillin resistant <i>Acinetobacter</i></b>	<b>A</b>	<b>10</b>	<b>0</b>
<b><i>baumannii</i> (Fairfax Hospital CI 02001)</b>	<b>B</b>	<b>10</b>	<b>0</b>
Ceftriaamicin resistant <i>Acinetobacter</i>	A	10	0
<i>baumannii</i> (Fairfax Hospital CI 02001)	B	10	0
<b>Bactrim resistant <i>Acinetobacter</i></b>	<b>A</b>	<b>10</b>	<b>0</b>
<b><i>baumannii</i> (Fairfax Hospital CI 02001)</b>	<b>B</b>	<b>10</b>	<b>0</b>

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**DISINFECTION DATA continued:**

**Conclusion:**

Under the conditions of these investigations, **Orderly** demonstrated disinfectant activity against *Staphylococcus aureus*, *Salmonella choleraesuis*, *Pseudomonas aeruginosa*, *Bordetella bronchiseptica*, *Corynebacterium ammoniagenes*, *Enterobacter aerogenes*, *Enterobacter cloacae*, *Enterococcus faecalis*, *Enterococcus faecalis* (Vancomycin Resistant)(VRE), *Escherichia coli*, *Fusobacterium necrophorum*, *Klebsiella pneumoniae subsp. pneumoniae*, *Lactobacillus casei subsp. rhamnosus*, *Listeria monocytogenes*, *Pasteurella multocida*, *Proteus mirabilis* (ATCC 9921), *Proteus mirabilis* (ATCC 25933), *Proteus vulgaris*, *Salmonella choleraesuis subsp. choleraesuis serotype paratyphi B*, *Salmonella choleraesuis subsp. choleraesuis serotype pullorum*, *Salmonella choleraesuis subsp. choleraesuis serotype typhi*, *Salmonella choleraesuis subsp. choleraesuis serotype typhimurium*, *Serratia marcescens*, *Shigella dysenteriae*, *Shigella flexneri Type 2b*, *Shigella sonnei*, *Staphylococcus aureus subsp. aureus*, *Staphylococcus aureus* (Methicillin Resistant)(MRSA), *Staphylococcus aureus* Vancomycin Intermediate Resistant (VISA), *Staphylococcus epidermidis*, *Streptococcus pyogenes* Group A, *Streptococcus pyogenes* (clinical-flesh eating strain, BIRD M3), Cefazolin resistant *Acinetobacter baumannii*, Ceftriaxone resistant *Acinetobacter baumannii*, Tobramycin resistant *Acinetobacter baumannii*, Levofloxacin resistant *Acinetobacter baumannii*, Ampicillin resistant *Acinetobacter baumannii*, Ceftazidime resistant *Acinetobacter baumannii*, Gentamicin resistant *Acinetobacter baumannii*, Ciprofloxacin resistant *Acinetobacter baumannii*, Bactrim resistant *Acinetobacter baumannii*, Community Associated Methicillin resistant *Staphylococcus aureus* (CA-MRSA) (NRS 123 Genotype USA400) and Community Associated Methicillin resistant *Staphylococcus aureus* (CA-MRSA) (NRS 384 Genotype USA300) according to criteria established by the U.S. Environmental Protection Agency for registration and labeling of a disinfectant product as a bactericide. **Orderly** also demonstrated disinfectant activity against the following antibiotic resistant clinical isolates: *Enterobacter cloacae*, *Enterococcus faecalis*, *Escherichia coli*, *Staphylococcus aureus*, *Staphylococcus epidermidis*, and *Xanthomonas maltophilia*.

**VIRUCIDAL DATA:**

Test Methods:                    **\*U.S. E.P.A. Pesticide Assessment Guidelines, Subdivision G: Product Performance, Section 91-2 (f), and Section 91-30, (d), (e), November 1982.**

Test Conditions:                **10 minute contact time, 5% serum, sterile glass petri dishes, 400 ppm hard water, 21-24°C exposure temperature, 2 oz/US gallon dilution.**

<u>Test Organism</u>	<u>Sample</u>	<u>Titer Reduction</u>
*Canine Distemper, strain Lederle (ATCC VR-128)	A      B	> 6.25 log   > 6.25 log

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**VIRUCIDAL DATA continued:**

*Feline Picornavirus, strain FRV (ATCC VR-649)	A	B	> 4.25 log	> 4.25 log
*Herpes Simplex type 1 (ATCC VR-260)	A	B	> 5.0 log	> 5.0 log
*Herpes Simplex type 2 (ATCC VR-734)	A	B	> 6.0 log	> 6.0 log
*Human Immunodeficiency Virus, HTLV-III <sub>RF</sub> , strain of HIV-1 (associated with AIDS)	A	B	> 3.5 log	> 3.5 log
*Human Immunodeficiency Virus type 2 (HIV-2), CBL-20 strain	A	B	> 3.25 log	> 3.25 log
*Bovine Rhinotracheitis, strain LA (ATCC VR-188)	A	B	> 5.0 log	> 5.0 log
*Influenza A <sub>2</sub> , strain Hong Kong (ATCC VR-544)	A	B	> 4.25 log	> 4.25 log
*Vaccinia, strain WR (ATCC VR-119)	A	B	> 5.5 log	> 5.5 log
*Avian Influenza A Virus (H3N2)(Avian Ressorant) (ATCC VR-20072)	A	B	> 4.25 log	> 4.25 log
*Avian Influenza Virus, Type A (Turkey/WIS/66) (H9N2)	A	B	>4.0 log	> 4.0 log
*Pseudorabies, strain Aujeszky (ATCC VR-135)	A	B	> 5.25 log	> 5.25 log
*Paramyxovirus	A	B	> 6.0 log	> 6.0 log

***Conclusion:***

Under the conditions of this investigation, **Orderly** was virucidal for Canine Distemper, Feline Picornavirus, Herpes Simplex type 1, Herpes Simplex type 2, Human Immunodeficiency Virus (HIV-1), Human Immunodeficiency Virus type 2 (HIV-2), Bovine Rhinotracheitis, Influenza A<sub>2</sub>, Pseudorabies, Avian Influenza A Virus (H3N2), Avian Influenza Virus Type A (H9N2), Vaccinia and Paramyxovirus according to criteria established by the U.S. Environmental Protection Agency for registration and labeling of a disinfectant product as a virucide. *Note:* The US EPA test methods are accepted in Canada.

**Orderly** has demonstrated effectiveness against Vaccinia and Influenza A virus and is expected to inactivate all Influenza A viruses including 2009 (H1N1) pandemic Influenza A virus.



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**MILDEW FUNGISTATIC DATA:**

Test Method: Hard Surface Mildew Fungistatic Test  
Test Organism: *Aspergillus niger* (ATCC 6275)  
Test Conditions: 400 ppm hard water, ceramic tile carriers, 2 oz/US gallon dilution

**Results:**

<u>Sample</u>	<u>No. of Exposed Tiles</u>	<u>No. of Tiles Showing Growth</u>
A	10	0
B	10	0
Control	10	10

**Conclusion:**

Under the conditions of this investigation, **Orderly**, was fungistatic for *Aspergillus niger* according to criteria established by the U.S. Environmental Protection Agency for registration and labeling of a disinfectant product as a fungistat.

**FUNGICIDAL DATA:**

Test Method: AOAC Fungicidal Activity of Disinfection  
Test Conditions: 5% blood serum, 20°C exposure temperature, 200 ppm hard water, 2 oz/US gallon dilution

**Results:**

<u>Test Organism</u>	<u>Exposure Time (min.) vs. Growth</u>			
	<u>Sample</u>	<u>5</u>	<u>10</u>	<u>15</u>
<i>Trichophyton mentagrophytes</i> (ATCC 9533)	A	+	0	0
	B	+	0	0
<i>Candida albicans</i> (ATCC 10231)	A	0	0	0
	B	0	0	0

**Conclusion:**

Under the conditions of this investigation, **Orderly**, was fungicidal for *Trichophyton mentagrophytes* and *Candida albicans* according to criteria established by the U.S. Environmental Protection Agency for registration and labeling of a disinfectant product as a fungicide.

# MATERIAL SAFETY DATA SHEET

## SECTION 1 – PRODUCT/MANUFACTURER'S IDENTITY

Product Name: **ORDERLY** WHMIS CODE: Not Regulated  
 Product Use: *Cleaner disinfectant. (1:64)* Proper Shipping Name: N/A  
**Canada DIN 02247847** Hazard Class: N/A  
 UN Number: N/A

HMIS	
3	Health
0	Flammability
0	Reactivity
B	Personal

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

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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

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
<b>Di-(C8-10)-Alkyl Dimethyl Ammonium Chlorides</b>	68424-95-3	1.0-5.0	N/A	N/A
<b>Alkyl Dimethyl Benzyl Ammonium Chlorides</b>	68424-85-1	1.0-5.0	N/A	N/A
LD50 (oral rat) 426 mg/kg				
LC50 (rat) 20,000 ppm/10H				
<b>ETHANOL</b>	64-17-5	0.5-1.5	N/A	N/A
LD50 (oral rat) 7060 mg/kg				
LD50 (oral mouse) 919 mg/kg				
<b>ALCOHOL ETHOXYLATE</b>	68439-46-3	1.0-5.0	N/A	N/A
LD50 (oral rat) 1376 mg/kg				
LD50 (dermal rabbit) >2 g/kg				

## SECTION 3 – PHYSICAL DATA

**Color and Odor:** Clear orange, citrus scent. **Boiling Point:** 93.3°C **Vapor Pressure (mm HG):** N/D **pH:** 6.5 – 7.5  
**Physical State:** Liquid. **Melting Point:** N/A **Vapor Density:** N/D **Specific Gravity:** 1.007 @ 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 known.  
**Unusual Fire and Explosion Hazards:** None known.  
**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