



# MATERIAL SAFETY DATA SHEET (MSDS)

## Quatromyicide II

Germicide and Sanitizer

Germicides



SECTION I ▶ PRODUCT IDENTIFICATION					
<b>Product Name</b> Quatromyicide II		<b>Product Type</b> Germicide and Sanitizer		<b>WHMIS Classification</b> Exempt	
SECTION II ▶ HAZARDOUS INGREDIENTS					
<b>Chemical Name</b>	<b>Cas Registry No.</b>	<b>%</b>	<b>Toxicity</b>		
Ethanol	64-17-5	1-5	TLV 1000 ppm		
N, N-Dialkyl (C8-10) - N, N-dimethylammonium Chloride	68424-95-3	5-10	LD50 oral (RAT) 168 mg/kg		
N-Alkyl (C12-16) - N, N-dimethyl-N-benzylammonium	68424-85-1	1-5	LD50 oral (RAT) 400 mg/kg		
SECTION III ▶ PHYSICAL DATA					
<b>Appearance</b>	<b>Odour</b>	<b>pH</b>	<b>Boiling Point</b>	<b>Specific Gravity</b>	<b>Solubility in Water</b>
Clear colourless liquid	Unscented	7.5	100 °C	1.0	100 %
SECTION IV ▶ FIRE AND EXPLOSION HAZARD DATA					
<b>Flash Point (°C):</b> None			<b>Extinguishing media:</b> Not Applicable		
<b>Special fire fighting procedures:</b> None					
<b>Unusual fire and explosion hazards:</b> None					
SECTION V ▶ TOXICOLOGICAL PROPERTIES					
<b>HAZARD RATING:</b> Health = 2 Flammability = 0 Reactivity = 1					<b>Rating System</b> 0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Extreme
<b>Swallowing:</b> Slightly Toxic					
<b>Inhalation:</b> Slight Irritant					
<b>Skin Absorption:</b> Unknown					
<b>Skin Contact:</b> Slight to Moderate Irritant					
<b>Eye Contact:</b> Irritant					
<b>Special Warning:</b> None					
SECTION VI ▶ FIRST AID MEASURES					
<b>Ingestion:</b> Promptly drink large quantities of milk, egg whites, gelatin or water. Avoid alcohol. Call a physician immediately.					
<b>Inhalation:</b> Not Applicable					
<b>Skin:</b> Flush thoroughly with water for at least 15 minutes. Remove and wash contaminated clothing.					
<b>Eyes:</b> Flush thoroughly with water for at least 15 minutes. Call a physician.					
SECTION VII ▶ REACTIVITY DATA					
<b>Stable:</b> Yes					
<b>Conditions to avoid:</b> None					
<b>Incompatibility with other materials:</b> None					
<b>Hazardous decomposition products:</b> None					
<b>Hazardous polymerization:</b> Will not occur.					
SECTION VIII ▶ PREVENTIVE MEASURES					
<b>Hand protection:</b> Yes (Wear chemical resistant gloves)					
<b>Eye protection:</b> Yes (Wear safety glasses with side shields)					
<b>Ventilation:</b> General					
<b>Respiratory protection:</b> None					
<b>Other protective equipment:</b> In case of spills, wear chemical resistant apron and boots.					
<b>Steps to be taken in case material is released or spilled:</b> Mop up spillage. Rinse spill area with water and allow to dry.					
<b>Waste disposal method:</b> Flush with water into waste systems in accordance with municipal, provincial and federal regulations.					
<b>Precautions to be taken in handling and storage:</b> Normal handling processes. Inside storage at 4-40 °C recommended.					
<b>Other precautions:</b> Follow label use instructions.					
<b>UN:</b> Not Applicable		<b>TDG Class:</b> None		<b>Packing Group:</b> Not Applicable	
<b>TDG Emergency Telephone Number:</b> 613-996-6666 (COLLECT)					
SECTION IX ▶ PREPERATION DATA					
<b>Prepared by:</b> M. Mikoluk			<b>Last updated:</b> June 1, 2015		
<b>Location:</b> Dustbane Products Limited, 25 Pickering Place, Ottawa, Ontario, K1G 5P4 – 613-745-6861					

# Quatromyicide II

## Germicide and Sanitizer

"A broad spectrum neutral quaternary ammonium bactericidal liquid which can be used as a final rinse to disinfect, sanitize and deodorize all surfaces unaffected by water. "

### HOW TO USE

Dilute according to the dilution rates mentioned below in potable water. Apply using a mop, sponge, cloth or trigger sprayer.

**Disinfection:** Heavily soiled surfaces must be cleaned prior to disinfection. Thoroughly apply diluted solution to wet the surface. For disinfection, allow to remain wet for 10 minutes then remove excess liquid.

**Sanitizing:** To sanitize, apply the solution and allow it to dry on the treated surface. No rinsing required.

#### Recommended dilution rates:

Disinfection ..... 1:250  
Sanitizing ..... 1:500

*Note: Adjust rates to suit your cleaning needs.*

**Please ensure that you are compliant with all regional regulations.**

### MICROBIOLOGY EFFICACY DATA SUMMARY

**Quatromyicide II** kills *Pseudomonas aeruginosa* (*Pseudomonas*), *Staphylococcus aureus* (*Staph*), *Salmonella choleraesuis* (*Salmonella*), *Campylobacter jejuni* (*Campylobacter*), *Listeria monocytogenes* (*Listeria*), *Escherichia coli* (*E. coli*), *Escherichia coli* pathogenic strain 0157:H7 (pathogenic *E. coli*), *Klebsiella pneumoniae* (*Klebsiella*), *Pseudomonas cepacia* (*Pseudomonas*), *Salmonella typhi* (*Salmonella*), Herpes Simplex Virus 1 & 2 (*Herpes*), *Vaccinia* (*Pox Virus*), *Trichophyton mentagrophytes* (*The Athlete's Foot Fungus*).

**Quatromyicide II** reduces 99.9% *Escherichia coli*, pathogenic *Escherichia coli* 0157:H7, *Listeria monocytogenes*, *Staphylococcus aureus* and *Klebsiella pneumoniae* in 60 seconds.

At 8mL per 4L of water dilution (200 ppm) QUATROMYCIDIDE II is an effective sanitizer against *Salmonella choleraesuis* (*Salmonella*), *Escherichia coli*, *Shigella sonnei* and *Staphylococcus aureus*, *Yersinia enterocolitica*, *Campylobacter jejuni*, *Escherichia coli* 0157:H7 and *Listeria monocytogenes* as determined by the AOCA germicide and detergent sanitizer method in the presence of 400 ppm hardness.

**Quatromyicide II** is an effective fungicide against *Trichophyton mentagrophytes* (the athlete's foot fungus) when used on surfaces in areas such as locker rooms, dressing rooms, shower and bath areas, exercise facilities.

**Quatromyicide II** is effective against Avian Influenza virus, Avian Influenza virus, Avian Infectious Bronchitis virus, Pseudorabies virus, Canine distemper virus, Newcastle Disease, Marek's Disease Virus, Infectious Bronchitis Arkansas 99' Virus, Human Immunodeficiency Virus (HIV), Adenovirus Type 5, and Infectious Laryngotracheitis Virus.

**Quatromyicide II** is a Hospital Disinfectant at 18 mL per 4L (450 ppm active), Bactericidal according to the current AOAC Disinfectants Use-Dilution Method, Fungicidal according to the AOAC fungicidal test and Virucidal\* according to the virucidal qualification, modified in the presence of 5% organic serum against: *Campylobacter jejuni*, *Pseudomonas aeruginosa*, *Staphylococcus aureus*, *Salmonella choleraesuis*, *Salmonella typhi*, *Escherichia coli* pathogenic strain 0157:H7, *Trichophyton mentagrophytes*, *Yersinia enterocolitica*, \*Influenza A2/Hong Kong (H1N1), *Vaccinia*, Human Immunodeficiency Virus, Adenovirus Type 5, Infectious Laryngotracheitis Virus, *Klebsiella pneumoniae*, *Listeria monocytogenes*, *Pseudomonas cepacia*, *Escherichia coli*, Herpes Simplex Type 1, Herpes Simplex Type 2

### SPECIFICATIONS

**Colour:** Clear, colourless liquid

**Odour:** Neutral

**pH (conc.):** 7.5

**W.H.M.I.S. Classification:** Exempt

**D.I.N. Registration:** 02321963

**Agri-Food Approved:** Yes