

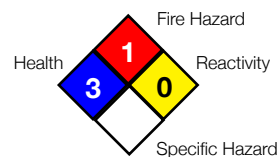


Material Safety Data Sheet

HMIS

Health Hazard	3
Fire Hazard	1
Reactivity	0
Personal Protection	c

NFPA



1. Chemical Product & Company Data

Product Name: Microban Milgo Plus (formerly Milgo QGC)		Revision Date: February 28, 2012
Manufacturer: ProRestore Products 4660 Elizabeth Street Coraopolis, PA 15108 Telephone: 1-412-264-8340	Supplier: Dri-Eaz Products, Inc. 15180 Josh Wilson Road Burlington, WA 98233 (360) 757-7776, (800) 932-3030	
CHEMICAL EMERGENCY: INFOTRAC (US) 1-800-535-5053 (INT'L) 1-800-323-3500		

2. Ingredients

Name	CAS #	UN #	% by volume
N, N-Dialkyl (C ₈₋₁₀) -N,N-dimethylammonium chloride	68424-95-3		3.3
N-Alkyl (C ₁₂₋₁₆) dimethylbenzylammonium chloride	68424-85-1		2.2
Secondary Alcohol Ethoxylates	84133-50-6		2.5
Tetrasodium ethylenediamine tetraacetate	64-02-8		1.9
Sodium metasilicate	6834-92-0		0.3
Ethanol	64-17-5		1.0
Water	7732-18-5		

3. Hazards Identification

Emergency Overview
Alkaline Liquid Mixture.
NOTE: Hazard information is based on the characteristics of the components of this mixture.
Ingestion - May cause abdominal discomfort, nausea, vomiting and diarrhea. Drowsiness or unconsciousness may occur.
Inhalation - Low concentration of the vapor may cause irritation of the respiratory tract with possible chest pain and coughing. High concentrations may cause headache and drowsiness.
Eye Contact - Causes eye irritation and possible permanent eye injury.
Skin Contact - Prolonged contact may cause discomfort, redness, drying and defatting of the skin.

4. First Aid

Ingestion - If swallowed, immediately give 3-4 glasses of milk (if unavailable, give water). Do not induce vomiting. If vomiting occurs, give fluids again. Get immediate medical attention. Have physician determine if patient's condition allows for induction of vomiting or evacuation of the stomach. Do not give anything by mouth to a convulsing or unconscious person.
Inhalation - Remove from area to fresh air. If not breathing, clear airway and start artificial respiration. If victim is having trouble breathing, give supplemental oxygen.
Eye Contact - Flush eyes with water for 15 minutes. Seek immediate medical attention.
Skin Contact - Wash with large amounts of running water, and soap if available, for 15 minutes. Remove contaminated clothing and shoes.
Note to physician - Probable mucosal damage may contraindicate the use of gastric lavage. Supplemental oxygen and or other measures to support breathing may be needed to combat circulatory shock. Persistent convulsions may be controlled by the cautious intravenous injection of a short acting barbiturate drug.

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5. Fire Fighting Measures

Flammability Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	If yes, under which conditions?	
Flashpoint: >200 °F (93.3 °C)	Upper flammable limit % by volume n. av.	Lower flammable limit % by volume n. av.
Autoignition temperature n. av.	Hazardous combustion products Products of combustion are toxic	Explosion data n. ap.
Means of extinction: Apply alcohol type or all purpose foam for large fires. Use dry chemical media or carbon dioxide extinguishers for small fires. SCBA and bunker gear for fire department personnel.		

6. Accidental Release Measures

<p>Warning: May be corrosive. Wear personal protective equipment. Do not allow spill to reach watercourse or sewers. Contain spill with absorbent mats or booms or inert materials such as sand. Material should be readily available in the workplace. Collect and store waste materials in suitable containers for disposal i.e. metal drums. Floors may become slippery.</p>

7. Handling & Storage

<p>PRECAUTIONS FOR STORAGE AND HANDLING: Store at temperatures below 140°F. Keep containers closed until used. Do not contaminate drinking water, food or feed by storage or disposal.</p>

8. Exposure Controls & Personal Protection

Personal Protective Equipment		
Gloves Rubber or neoprene, to prevent skin contact.	Respirator In processes where mists or vapors may be generated, a NIOSH/MSHA jointly approved respirator is advised in the absence of proper environmental controls.	Eye Wear chemical splash goggles where there is a potential for eye contact. Use safety glasses with side shields under normal use conditions.
Footwear n. ap.	Clothing Coveralls or equivalent	Other Eye wash; safety shower; protective clothing (long sleeves, coveralls or other, as appropriate), when needed, to prevent skin contact.
Exposure Guidelines		
<p>EFFECTS OF OVEREXPOSURE No information found for human exposure. Based on the available animal toxicity information for this and similar products, it is anticipated that direct contact with this material will produce severe skin or eye irritation. Upon prolonged contact, burns and possible irreversible damage may occur. Solvent vapors or mists of products can cause irritation of mucous membranes. Exposure to Ethanol concentrations of over 1,000 ppm may cause headache, irritation of the eyes, nose and throat, and, if long continued, drowsiness and loss of appetite and inability to concentrate.</p>		

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9. Physical and Chemical Properties

Physical state Liquid	Odor and appearance Clear liquid, odor varies with fragrance	
Odor threshold (ppm) n. av.	Vapor pressure (mm Hg) n. av.	Vapor density (Air=1) n. av.
Evaporation (butyl acetate = 1) n.av.	Boiling point 215.6 °F (102 °C)	Freezing point n. av.
pH 12.4	Specific gravity 1.01 @ 77 °F (25 °C)	Coefficient water/oil distribution n. av.
Solubility in water 100%	Viscosity <100 cps @ 77 °F (25 °C)	% Volatiles (by weight) 90%

10. Stability and Reactivity

Chemical Stability Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	If no, under which conditions?
Incompatibility with other substances Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	If yes, under which conditions? Avoid strong oxidizing agents.
Reactivity, and under what conditions?	Stable under normal conditions.
Hazardous decomposition products?	Thermal decomposition may produce toxic vapors/fumes of hydrogen chloride, amines, and other organic materials and oxides of carbon and nitrogen.

11. Toxicological Information

Route of Entry Skin Contact <input checked="" type="checkbox"/> Skin Absorption <input checked="" type="checkbox"/> Eye Contact <input checked="" type="checkbox"/> Inhalation <input checked="" type="checkbox"/> Ingestion <input type="checkbox"/>			
oral LD ₅₀ (rat): 2800 mg/kg dermal LD ₅₀ (rabbit): 2850 mg/kg eye irritation (rabbit): extreme irritant (primary irritation = 97.5 without washing, and 93.3 with washing) skin irritation (rabbit): severe irritant (primary irritation index 8.0) DOT skin corrosivity (rabbit): non-corrosive skin irritation at 1:64 use dilution: non-irritant (primary irritation index = 0.0)			
Carcinogenicity No	Mutagenicity No	Teratogenicity No	Reproductive toxicity No
Synergistic products No	Sensitization No	Neurotoxicity No	Target organs Eyes and Skin

12. Ecological Information

None known.

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13. Disposal Considerations

Dispose of in compliance with all Federal, state, and local laws and regulations.

14. Transport Information

Shipping Name: CLEANING COMPOUNDS, N.O.I.

Hazard Class:

UN Identification #:

15. Regulatory Information

This material safety data sheet has been prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the Hazardous Products Act (Can.) and the Controlled Products Regulations (Can.) This product has been classified in accordance with the hazard criteria of the CPR (Can.) and the MSDS contains all the information required by the CPR (Can.).

SARA Title III Sections 311/312 - This act requires reporting under the Community Right-to-Know provisions due to the inclusion of the following components of this material in one or more of the five hazard categories listed in 40 CFR 370:

Chemical Name	CAS Number	Hazard *) Categories
N, N-Dialkyl (C ₈₋₁₀)-N,N-dimethylammonium chloride	68424-95-3	A
N-Alkyl (C ₁₂₋₁₆)dimethylbenzylammonium chloride	68424-85-1	A
Ethanol	64-17-5	F
Secondary alcohol ethoxylates	84133-50-6	A

*) The five hazard categories are as follows: F= FIRE HAZARD; S=SUDDEN RELEASE OF PRESSURE; R=REACTIVE; A=IMMEDIATE (ACUTE) HEALTH HAZARD; C=DELAYED (CHRONIC) HEALTH HAZARD.

FEDERAL LEVEL REGULATIONS: This is an EPA FIFRA registered pesticide (EPA Registration No. 70385-6). This material can only be used commercially in the EPA registered application(s) noted on the product label.

TOXIC SUBSTANCES CONTROL ACT (TSCA INVENTORY) STATUS: Found on U.S. EPA TSCA inventory.

Canadian Workplace Hazardous Material Information System (WHMIS) Classification

Not Regulated

Domestic Substance List (DSL) Status

All the components of this material are currently listed on the Canadian DSL.

Transport of Dangerous Goods (TDG)

Not Regulated

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986):

WARNING: This product contains a chemical(s) known to the State of California to cause cancer and/or birth defects or other reproductive harm.

16. Other Information

This product is a disinfectant and cleaner.

Abbreviations:

n. av. = not available

mm Hg = millimeters of Mercury

COC = Cleveland Open Cup

LD = Lethal Dose

n. ap. = not applicable

PMCC = Pensky Martens Closed Cup

TWA = Time Weighted Average

LC = Lethal Concentration

ppm = parts per million

TCC = Tagliabue Closed Cup

STEL = Short Term Exposure Limit

CS = centistokes

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