



# MATERIAL SAFETY DATA SHEET (MSDS)

## Vanguard

General Purpose Germicidal Cleaner - 5th Generation

Germicides



SECTION I ▶ PRODUCT IDENTIFICATION					
<b>Product Name</b>		<b>Product Type</b>		<b>WHMIS Classification</b>	
Vanguard		General Purpose Germicidal Cleaner		Exempt	
SECTION II ▶ HAZARDOUS INGREDIENTS					
<b>Chemical Name</b>		<b>Cas Registry No.</b>	<b>%</b>	<b>Toxicity</b>	
Alkyl Dimethyl Benzyl Ammonium Chloride		68424-85-1	1-5	LD <sub>50</sub> ORAL (RAT) 366 mg/kg	
Didecyl Dimethyl Ammonium Chloride		7173-51-5	1-5	Not Available	
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 yellow-green liquid	Scented	7.2	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 = 0					<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> Remove to fresh air. Call a physician.					
<b>Skin:</b> Flush thoroughly with water for at least 15 minutes. Remove and wash contaminated clothing. Call a physician.					
<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> Chemical resistant gloves					
<b>Eye protection:</b> 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> D.R. Dunlop			<b>Last updated:</b> August 1, 2012		
<b>Location:</b> Dustbane Products Limited, 25 Pickering Place, Ottawa, Ontario, K1G 5P4 – 613-745-6861					

# Vanguard

## General Purpose Germicidal Cleaner - 5th Generation

“Cleans, disinfects and deodorizes in one labour-saving step. This quat-based cleaner is highly efficient in destroying a wide range of bacteria, viruses and fungi such as salmonella and staphylococcus aureaus.”

### FEATURES AND BENEFITS

**Environmentally friendly:** A.P.E. free.

**Neutral quat:** Preserves the floor finish appearance.

**Excellent cleaning abilities:** Handles heavy duty cleaning on hard non-porous surfaces.

**Multiple claims:** Effectively destroys a broad range of bacteria, fungi and viruses including: Pseudomonas aeruginosa, Staphylococcus aureaus, Salmonella choleraesuis, Trichophyton mentagrophyte, Influenza A/Hong Kong, Vaccinia.

**Citrus fragrance:** Leaves the area smelling fresh and clean.

### WHERE TO USE

For use on hard non-porous surfaces such as floors, walls, furniture, sinks, tubs, toilets, garbage pails, counter tops, metal and plastic surfaces.

VANGARD is intended for use in veterinary clinics, laboratories, hospitals, dental clinics, nursing homes, food processing facilities and federally inspected meat, poultry and fish establishments.

Surfaces subject to direct food contact should be adequately rinsed with potable water.

### HOW TO USE

#### Recommended Dillution Rates:

General Cleaning	1:80 - 1:160
Heavy Duty Cleaning	1:40 - 1:80
Disinfection	1:80

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

Apply with a mop, sponge or cloth.

**MOLD AND MILDEW:** When mixed at a rate of 1:80, VANGARD effectively inhibits the growth of odour-causing mold and mildew. Apply the solution and allow it to dry on the treated surface. Repeat treatment when mold or mildew returns.

**DISINFECTING:** Allow a minimum contact time of 10 minutes in a single application. Surfaces subject to direct food contact should be adequately rinsed with potable water. Heavily soiled surfaces may require a precleaning step.

**HIV-1:** When mixed at a rate of 1:80, VANGARD may be used to clean and decontaminate hard surfaces exposed to blood or other body fluids that contain the HIV-1 virus. Thoroughly clean all hard surfaces removing blood and body fluids prior to disinfection. Allow surfaces to remain wet for a minimum of 4 minutes. Wear protective clothing including latex gloves, gown, mask and eye goggles. Blood, body fluids, cleaning materials and clothing should be autoclaved and disposed of according to local regulations. [Note: efficacy testing was done in the presence of hard water (400 ppm as CaCo<sub>3</sub>) and a soil load (5% blood serum)].

### SPECIFICATIONS

**Didecyl dimethyl ammonium chloride:** 2.88%

**n-Alkyl (50% C14, 40% C12, 10% C16); dimethyl benzyl ammonium chloride:** 1.92%

**pH, concentrate @ 25°C:** 7.2 - 7.7 (neutral)

**pH, at 1:80 @ 25°C:** 7.0 - 7.5

**Colour:** Yellow-green

**Odour:** Citrus

**DIN#:** 02213109

**Agri-Food Approval:** Yes