

**Manufactured for Hacco, Inc.
By Armstrong Manufacturing
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(Hacco, Inc., Regulatory Office)
(905) 566-1395**

(Armstrong Manufacturing, Manufacturing Location)

In Case of Emergency, Call:
1-800-498-5743 (U.S. Medical Emergency)
1-651-523-0318 (International, Medical Emergency)
1-800-424-9300 (U.S. CHEMTREC)
1-703-527-3887 (International, CHEMTREC)
(collect calls will be accepted on all lines)

1. PRODUCT IDENTIFICATION

Product Name: **Proquat[™] Germicidal Detergent**

EPA Signal Word: **DANGER**

Chemical Name: Didecyl Dimethyl Ammonium Chloride

Chemical Class: Disinfectant

Canadian Drug Identification Number: 02246131

Section(s) Revised: None (Annual Review)

2. COMPOSITION/INFORMATION ON KEY INGREDIENTS

Ingredient Name	OSHA PEL	ACGIH TLV (Units)	NTP/IARC/OSHA Carcinogen	Percentage by Weight
Didecyl dimethyl ammonium chloride (CAS No. 7173-51-5)	Not Established	Not Established	No	1.4 %
Alkyl (50% C ₁₄ , 40% C ₁₂ , 10% C ₁₆) dimethyl benzyl ammonium chloride (CAS No. 68424-85-1)	Not Established	Not Established	No	11.2 %
Ethoxylated nonylphenol (CAS No. 9016-45-9)	Not Established	Not Established	No	5 – 10 %
Tetrasodium EDTA (CAS No. 64-02-8)	Not Established	Not Established	No	1 – 5 %
Sodium Carbonate (CAS No. 497-19-8)	Not Established	Not Established	No	1 – 5 %

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

3. HAZARDS IDENTIFICATION SUMMARY

Emergency Overview

DANGER: Primary Routes of Entry of Concern are Eye Contact, Skin Contact, and Inhalation.

Health Effects

Eyes: Contact can result in irritation.

Skin: Contact can cause irritation.

Inhalation: Moderately irritating to the eyes, nose, throat and lungs. High concentration of vapors may cause irritation, or if inhaled as a mist.

Ingestion: Harmful or fatal if swallowed. May burn mouth, throat and stomach.

Hazardous Decomposition Products

None known.

Physical Properties

Appearance: Clear, yellow liquid

Odor: Lemon

Unusual Fire, Explosion, and Reactivity Hazards

None known.

4. FIRST AID MEASURES

Have the product container, label or product name, DIN number, and Material Safety Data Sheet with you when calling a poison control center or doctor, or going for treatment. **FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL 1-800-498-5743 (U.S. Medical Emergencies) or 1-651-523-0318 (International Medical Emergencies, Collect Calls will be accepted).**

Eye Contact: IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open.

Skin Contact: Flush skin with plenty of water, for at least 15 minutes, while removing contaminated clothing. Call physician immediately. Wash contaminated clothing before reuse.

If swallowed: Immediately call poison control center or physician for treatment advice. DO NOT induce vomiting. Give several glasses of water. Never give anything by mouth if person is unconscious or convulsing.

If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

5. FIRE FIGHTING MEASURES

Fire and Explosion

Flash Point (Test Method): Not Applicable

Flammable Limits (% in Air): Lower: % Not Available Upper: % Not Available

Autoignition Temperature: Not Available

Extinguishing Media: Dry chemical, carbon dioxide, alcohol foam, water spray or fog.

Hazardous Combustion Products:

Not Applicable

Unusual Fire, Explosion, and Reactivity Hazards

None known.

In Case of Fire

Use water spray to cool containers exposed to fire. Remain upwind. Avoid breathing smoke. Wear self-contained breathing apparatus and full protective gear. Avoid using heavy streams of water.

6. ACCIDENTAL RELEASE MEASURES

Emergency Action

Isolate spill or leak area immediately. Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering.

Do not touch or walk through spilled material. Wear appropriate personal protective equipment during cleanup.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Prevent material from entering sewers, waterways or low areas.

Large Spills: Dike ahead of liquid spill for later disposal. Absorb into inert material (sawdust, sand, oil dry, or other absorbent material) and place in plastic or plastic-lined containers for proper disposal.

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

7. HANDLING AND STORAGE

Handling Procedures: Avoid contact with skin and eyes. Avoid breathing vapors or mists of this product. Wash thoroughly after handling. As with all chemicals, good industrial hygiene practices should be followed when handling this material.

Storage precautions: Store in a dry, well-ventilated area. Avoid freezing or excessive heat.
DO NOT CONTAMINATE WATER, FOOD OR FEED BY STORAGE OR DISPOSAL.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation: Local ventilation is recommended. Work in well-ventilated areas.
Eye Contact: Chemical goggles or shielded safety glasses.
Skin Contact: Wear rubber gloves and apron and other equipment as required by workplace standards.
Inhalation: Normally not required.
General: Eye wash fountain and emergency showers are recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear, yellow liquid
Odor: Lemon
Boiling Point: Not Available
Specific Gravity: 1.03 g/ml (water = 1)
pH: 10.5 – 11.5
Solubility in H₂O: Very Soluble
Vapor Pressure: Not Available
Percent Volatile: Approximately 75% (by volume)
Evaporation Rate: Not Applicable

Note: The physical data presented here are typical values based on material tested, but may vary from sample to sample.
Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

10. STABILITY AND REACTIVITY

Stability: Stable under normal use and storage conditions.
Hazardous Polymerization: Will not occur.
Conditions to Avoid: None known. Keep containers tightly closed when not in use.
Materials to Avoid: Strong oxidizing agents, strong reducing agents.
Hazardous Decomposition Products: None known.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity/Irritation Studies

Ingestion: Acute Toxicity
Oral LD₅₀ (rat): 450 mg/kg (Didecyl dimethyl ammonium chloride)
Oral LD₅₀ (rat): 426 mg/kg (Alkyl dimethyl benzyl ammonium chloride)
Dermal: Acute Dermal Effects
Not Available
Inhalation: Acute Inhalation Effects
Not Available
Other:
Eye Contact: May cause severe eye irritation. Repeated / prolonged exposures may cause eye damage.
Skin Contact: May cause skin irritation.

Carcinogenicity

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to fish. Toxic to aquatic organisms.

Do not discharge effluent containing this product directly to water. Do not contaminate water when disposing of equipment wash water.

13. DISPOSAL CONSIDERATIONS

1. Do not reuse empty container.
2. Rinse the emptied container thoroughly and add the rinsings to treatment site.
3. Follow provincial instructions for any required additional cleaning of the container prior to its disposal or reconditioning.
4. Dispose of the container in accordance with provincial requirements.
5. For information on the disposal of unused, unwanted product and the cleanup of spills contact the regional office of Environment Canada.
6. For small spills, recover free liquid. Soak up residue with a solid absorbent such as dry clay. Sweep up spill, and put into disposal container and dispose as per point 5.

**DO NOT FLUSH INTO SURFACE STREAMS.
INFORM ENVIRONMENT CANADA AS IN POINT 5.**

14. TRANSPORT INFORMATIONDOT Classification (for container sizes 20 – 200 liter)

Proper Shipping Name: Corrosive Liquids, Basic, Organic, N.O.S., (Quaternary Ammonium Compounds, Tetrasodium salt of EDTA)
Hazard Class: 8
UN Number: 3267
Packing Group: III
Label: Class 8, Corrosive
Special Instructions: Not Applicable

DOT Classification (for container sizes 4x1 gallon)

Proper Shipping Name: Corrosive Liquids, Basic, Organic, N.O.S., (Quaternary Ammonium Compounds, Tetrasodium salt of EDTA)
Hazard Class: 8
UN Number: 3267
Packing Group: III
Label: Class 8, Corrosive
Special Instructions: Not Applicable

IMDG Classification (for container sizes 20 – 200 liter)

Proper Shipping Name: Corrosive Liquids, Basic, Organic, N.O.S., (Quaternary Ammonium Compounds, Tetrasodium salt of EDTA)
Hazard Class: 8
UN Number: 3267
Packing Group: III
Label: Class 8, Corrosive
Special Instructions: Not Applicable

IMDG Classification (for container sizes 4x1 gallon)

Proper Shipping Name: Corrosive Liquids, Basic, Organic, N.O.S., (Quaternary Ammonium Compounds, Tetrasodium salt of EDTA)
Hazard Class: 8
UN Number: 3267
Packing Group: III
Label: Class 8, Corrosive
Special Instructions: Not Applicable

IATA Classification (for container sizes 20 – 200 liter & 4x1 gallon)

Proper Shipping Name: Corrosive Liquids, Basic, Organic, N.O.S., (Quaternary Ammonium Compounds, Tetrasodium salt of EDTA)
Hazard Class: 8
UN Number: 3267
Packing Group: III
Label: Class 8, Corrosive
Special Instructions: Not Applicable

Canadian Classification (for container sizes 20 – 200 liter)

Proper Shipping Name: Corrosive Liquids, Basic, Organic, N.O.S., (Quaternary Ammonium Compounds, Tetrasodium salt of EDTA)
Hazard Class: 8
UN Number: 3267
Packing Group: III
Label: Class 8, Corrosive
Special Instructions: Not Applicable

Canadian Classification (for container sizes 4x1 gallon)

Proper Shipping Name: Corrosive Liquids, Basic, Organic, N.O.S., (Quaternary Ammonium Compounds, Tetrasodium salt of EDTA)
Hazard Class: 8
UN Number: 3267
Packing Group: III
Label: Class 8, Corrosive
Special Instructions: Not Applicable

15. REGULATORY INFORMATION

EPA SARA Title III Hazard Classification

Immediate	<u>Y</u>	Fire	<u>N</u>	Sudden Release of Pressure	<u>N</u>
Delayed	<u>N</u>	Reactive	<u>N</u>		

Section 313 Toxic Chemicals

Not Applicable

California Proposition 65

Not Applicable

Reportable Quantity (RQ) CERCLA/SARA 302/DOT

Not Applicable

RCRA Hazardous Waste Classification (40 CFR 261)

Not Listed

WHMIS Information

Not controlled under WHMIS. Regulated under Health Canada, TPD (Therapeutic Products Directorate), DIN# 02246131

16. OTHER INFORMATION

NFPA Hazard Ratings

Health: 2
Flammability: 0
Instability: 0

HMIS Hazard Ratings

Health: 2
Flammability: 0
Reactivity: 0
PPE: X

0 - Minimal
1 - Slight
2 - Moderate
3 - Serious
4 - Extreme

For Non-Emergency Questions about this Product Call:

1-800-621-8829

Neogen Corporation

Lexington, KY

www.Hacco.com

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NOTICE TO USER

THIS PRODUCT IS TO BE USED ONLY IN ACCORDANCE WITH THE DIRECTIONS ON THIS LABEL.

NOTICE TO BUYER

SELLER'S GUARANTEE SHALL BE LIMITED TO THE TERMS SET OUT ON THE LABEL AND, SUBJECT THERETO, THE BUYER ASSUMES THE RISK TO PERSONS OR PROPERTY ARISING FROM THE USE OR HANDLING OF THIS PRODUCT AND ACCEPTS THE PRODUCT ON THAT CONDITION.

REFER TO MATERIAL SAFETY DATA SHEET (MSDS) FOR FURTHER INFORMATION.