

MATERIAL SAFETY DATA SHEET

Total Solutions
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GENERAL INFORMATION NUMBER: (414) 354-6417
CHEMTREC: (800) 424-9300

REVISION DATE: January 24, 2006
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I - Product Identification

Vanquish

PRODUCT CODE: 0175

CHEMICAL FORMULATION: Quaternary-based disinfectant.

NFPA HAZARD IDENTIFICATION SYSTEM: HEALTH: 3

HAZARD RATING: 4 - Extreme; 3 - High; 2 - Moderate; 1 - Slight; 0 - Insignificant

FLAMMABILITY: 1

REACTIVITY: 0

II - Hazardous Ingredients

Values reported as TWA unless noted.

<u>SUBSTANCE</u>	<u>APPROX</u> <u>%</u>	<u>PEL</u>	<u>ACGIH</u> <u>TLV</u>	<u>EPA 40 CFR:</u>			<u>CAS #</u>
				<u>302</u>	<u>355</u>	<u>372</u>	
N,N-Dialkyl (C ₈₋₁₀)-N,N-dimethylammonium chloride	3.30	N/E	N/E	N	N	N	68424-95-3
N-Alkyl (C ₁₂₋₁₆) dimethylbenzylammonium chloride	2.20	N/E	N/E	N	N	N	68424-85-1
Poly (oxyethylene) nonylphenol	2.50	N/E	N/E	N	N	N	9016-45-9
Tetrasodium ethylenediamine tetraacetate	1.90	N/E	N/E	N	N	N	64-02-8

Key: **PEL:** Permissible Exposure Limit **TLV:** Threshold Limit Value **C:** Ceiling level **STEL:** Short Term Exposure Limit
N/A: Not Applicable **N/D:** Not Determined **N/E:** Not Established **Y:** Yes **N:** No
302: CERCLA List of Hazardous Substances and Reportable Quantities (40 CFR 302.4).
355: SARA TITLE III / List of Extremely Hazardous Substances for Emergency Planning and Notification (40 CFR 355).
372: SARA TITLE III / List of Toxic Chemicals subject to Release Reporting (Community Right to Know) (40 CFR 372).

III - Physical Data

BOILING POINT (°F): N/D **SPECIFIC GRAVITY (WATER = 1):** 1.01
VAPOR PRESSURE (mm Hg): N/D **VOC CONTENT (% by weight):** N/D
VAPOR DENSITY (AIR = 1): N/D **EVAPORATION RATE (WATER = 1):** N/D
SOLUBILITY IN WATER: Soluble **pH:** 12.40
APPEARANCE AND ODOR: Clear, colorless liquid; detergent odor.

IV - Fire and Explosion Hazard Data

FLASH POINT (°F): > 200 **(TEST METHOD):** N/D
FLAMMABLE LIMITS IN AIR (VOLUME %) **UPPER:** N/D **LOWER:** N/D
EXTINGUISHING MEDIA: Water, alcohol foam, carbon dioxide, dry chemical.
SPECIAL FIRE FIGHTING PROCEDURES: Cool fire exposed containers with water fog. Firefighters should be equipped with full protective gear including self-contained breathing apparatus.
UNUSUAL FIRE AND EXPLOSION HAZARD: Products of combustion are toxic.

V - Reactivity Data

STABILITY: Stable.

INCOMPATIBILITY: Strong acids.

CONDITIONS TO AVOID: None.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may produce hydrogen chloride, amines and other organic materials, oxides of carbon and nitrogen.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: None

VI - Health Hazard Data

ROUTES OF ENTRY **INHALATION:** X **EYE CONTACT:** X **SKIN CONTACT:** X **INGESTION:**
INGREDIENTS THAT ARE CONSIDERED BY OSHA, NTP, IARC TO BE SUSPECTED HUMAN CARCINOGENS: None

EFFECTS OF OVEREXPOSURE

IF IN EYES: Moderate to severe irritation, redness, tearing. Possible burns and irreversible damage may occur with prolonged contact.

IF ON SKIN: Moderate to severe irritation, chapping with prolonged or repeated exposure.

IF SWALLOWED: Immediate burning pain in the mouth, throat, abdomen and severe swelling of the larynx. Skeletal muscle paralysis affecting the ability to breath, circulatory shock, convulsions, may be fatal. Gastrointestinal irritation, nausea, cramps, diarrhea.

IF INHALED: May cause headache, irritation to the eyes, nose and throat and mucous membranes. .

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, as well as measures to support breathing manually or mechanically may be needed. Provide oxygen, if individual is having difficulty breathing.

EMERGENCY AND FIRST AID PROCEDURES

IF IN EYES: Flush eyes and under eyelids with plenty of cool water for at least 15 minutes. If irritation persists, obtain medical attention.

IF ON SKIN: Wash with soap and large amounts of water for 15 minutes. Remove contaminated clothing and launder before reuse.

IF SWALLOWED: Contact physician or poison control center immediately. Give 3-4 glasses of milk or water. Do not induce vomiting unless instructed by a physician or poison control center. Do not give anything to an unconscious person.

IF INHALED: Remove person to fresh air. If victim is not breathing, administer artificial respiration. If victim is breathing, give oxygen.

VII - Spill or Leak Protection

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Ventilate area and contain spill. Soak up with inert absorbent material and placed in a closed container for disposal. Flush away residue with water.

WASTE DISPOSAL METHOD: Consult local environmental authorities.

VIII - Special Protection Information

RESPIRATORY PROTECTION: Use with adequate ventilation. Do not breathe vapors or mists. If recommended Exposure Limits are exceeded wear a NIOSH approved respirator, following manufacturer's recommendations.

VENTILATION

LOCAL: Recommended

MECHANICAL: Not required

PROTECTIVE GLOVES: Chemical resistant.

EYE PROTECTION: Safety glasses or goggles.

OTHER PROTECTIVE EQUIPMENT: Eye wash station, safety shower and protective clothing.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Store in a cool, dry place. Keep container tightly closed when not in use. Do not contaminate drinking water, food or feed by storage or disposal.

OTHER PRECAUTIONS: Keep out of reach of children.

IX - Transportation Information (ground transportation only)

DOT PROPER SHIPPING NAME: None

DOT CLASS: None

DOT ID NUMBER: None

DOT PACKING GROUP: None

The shipping information listed above applies only to non-bulk (< 119 gallons) containers of this product. This product may have more than one proper shipping name depending on packaging, product properties, & mode of shipment. If any alteration of packaging, product, or mode of transportation is further intended, different shipping names and labeling may apply.

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