

MATERIAL SAFETY DATA SHEET

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION:

Manufactured by:

Quip Laboratories, Inc.
1500 Eastlawn Avenue
Wilmington, DE 19802

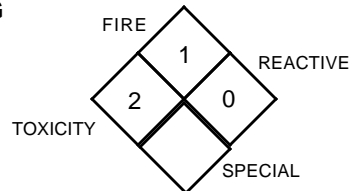
Non-Emergency: (302) 761-2600

CHEMICAL EMERGENCY NUMBER
CHEMTREC
1-800-424-9300

Product Name: **Novadex 7-5**
 Formula: EPA Reg. No. 47371-147-46269
 Chemical Family: Disinfecting liquid, Quaternary Ammonium Chloride
 Chemical Name: Mixture

HAZARD RATING

4-EXTREME
3-HIGH
2-MODERATE
1-SLIGHT
0-INSIGNIFICANT



SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS:

	Approximate Weight %:	TWA/TLV
N, N-Didecyl-N,N-dimethylammonium chloride (C.A.S. No. 7173-51-5)	2.35	None Established
N-Alkyl (C ₁₂₋₁₆) -N,N-dimethyl-N- benzylammonium Chloride (C.A.S. No. 8001-54-5)	1.50	None established
Ethanol (C.A.S. No. 64-17-5)	0.65	1000 ppm (OSHA/PEL) 1000 PPM (ACGIH/TWA)
Water (C.A.S. No. 7732-18-5)	95.50	None Established

SECTION 3: HEALTH HAZARD IDENTIFICATION DATA:

ROUTES OF ENTRY: Eyes; Yes Skin; Yes Inhalation; Yes Ingestion; No

EFFECTS OF OVEREXPOSURE:

EYE CONTACT: Direct contact can produce severe eye irritation, or even eye damage

SKIN CONTACT: Direct or prolonged contact can produce severe irritation to skin. **Irritating liquid.**

INHALATION: Solvent vapors or mist of product can produce irritation of mucous membranes. Exposure to ethyl alcohol concentrations greater than 1000 ppm cause headache, irritation of the eyes, nose and throat, and, if prolonged, drowsiness and lassitude, loss of appetite and ability to concentrate.

INGESTION: Immediate burning pain in the mouth, throat, abdomen and severe swelling of larynx, skeletal muscle paralysis affecting the ability to breath, circulatory shock, convulsions. May be fatal.

CARCINOGENICITY: NTP; No IARC; No OSHA; No

OVEREXPOSURE MAY AGGREGATE EXISTING CONDITIONS: No effects indicated.

SECTION 4: EMERGENCY & FIRST AID PROCEDURES:

EYES: Flush eyes with large amounts of running water for at least 15 minutes. Hold eyelids apart to ensure rinsing of the entire surface of the eye and lids with water. Get immediate medical attention. If physician is not available, rinse for an additional 15 minutes and then transport victim to medical care.

SECTION 4: EMERGENCY & FIRST AID PROCEDURES (Continued):

SKIN: Wash with large amount of running water, and soap if available, for 15 minutes. Remove contaminated clothing and shoes. Get immediate medical attention. Wash contaminated clothing and decontaminate shoes before re-use.

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. (See Note to Physician, section 13) Never give anything by mouth to a convulsing or unconscious person.

INHALATION: Remove from area to fresh air. If not breathing, clear air way and start artificial respiration. If victim is having trouble breathing, give supplemental oxygen, if available. Get immediate medical attention.

SECTION 5: FIRE FIGHTING MEASURES:

FLASH POINT: >200° F

FLAMMABILITY: LEL: N/A, UEL: N/A

EXTINGUISHING MEDIA: Water Fog, Alcohol Foam, CO₂ , Dry Chemical.

SPECIAL FIRE FIGHTING PROCEDURES: Must wear NIOSH/MSHA approved self contained breathing apparatus and protective clothing. Cool fire-exposed containers with water spray.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Products of combustion are toxic.

SECTION 6: ACCIDENTAL RELEASE MEASURES:**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:**

Warning! Irritant liquid. Floors may become slippery. Wear appropriate protective gear and respiratory protection where mists and vapors of unknown concentrations may be generated (self-contained breathing apparatus preferred).

Dike and contain spill with inert material (sand, earth, etc.), and transfer the liquid and solid separately to containers for recovery or disposal. Keep spill out of sewers and open bodies of water.

WASTE DISPOSAL METHODS: Dispose of in compliance with all Federal, state and local laws and regulations. Incineration is the preferred method.

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary, landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

SECTION 7: HANDLING AND STORAGE:**PRECAUTIONS FOR STORAGE AND HANDLING :**

Maximum storage temperature: 140° F. Keep containers closed until used. Do not contaminate drinking water, food or feed by storage or disposal.

Keep lids tightly closed when not in use. Never move drums with open bungs. Keep properly labeled.

SECTION 8: EXPOSURE CONTROL / PERSONAL PROTECTION INFORMATION:

VENTILATION TYPE: In processes where mists or vapors may be generated, proper ventilation must be provided in accordance with good ventilation practices.

RESPIRATORY PROTECTION: In processes where mists or vapors may be generated, a NIOSH/MSHA jointly approved respirator is advised the absence of proper environmental controls.

PROTECTIVE GLOVES: Rubber or neoprene, to prevent skin contact.

EYE PROTECTION: Wear Chemical Splash Goggles where there is a potential for eye contact. Use safety glasses with side shields under normal use conditions.

OTHER PROTECTIVE EQUIPMENT: Eye Wash; Safety Shower; protective clothing (long sleeves, coveralls or other, as appropriate), to prevent skin contact.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE: Clear colorless liquid
SPECIFIC GRAVITY: (Water=1) 1.0 @ 25° C
SOLUBILITY IN WATER: Complete
PERCENT VOLATILE BY WEIGHT: 93-96
VAPOR DENSITY: (Air = 1) N/A
EVAPORATION RATE: (Butyl Acetate=1) Not Known

ODOR: Mild Solvent Odor
pH: 6.0 - 8.0
VISCOSITY @ 25° C: <50 cps
BOILING POINT: Not Known

SECTION 10: STABILITY & REACTIVITY DATA:

INCOMPATIBLE MATERIALS: None known
STABILITY: Stable.
CONDITIONS TO AVOID: None known.
HAZARDOUS POLYMERIZATION: Will not occur.
HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may produce toxic vapors/fumes of hydrogen chloride, amines and other organic compounds, and oxides of carbon and nitrogen.

SECTION 11: TOXICOLOGICAL INFORMATION:

No toxicology information is available for this product. The toxicology information provided below is for closely related products.

ACUTE:

(For an alkaline formulation containing 3.85% active quat with surfactant and a pH ~13):

- Oral LD₅₀ (rat): 1850 mg/kg
- Dermal LD₅₀ (rabbit): 4430 mg/kg
- Eye irritation (rabbit 1:64 dilution): Essentially not an irritant.
- Skin irritation (rabbit 1:64): Not an irritant.

(For alkaline formulation containing 4.0% active quat with surfactant and a pH ~13)

- Eye irritation (rabbit): Severe eye irritant, with or without washing.
- Skin irritation (rabbit): Severe irritation.

SECTION 12: TRANSPORT INFORMATION:

INTERNATIONAL: N/A

US TRANSPORTATION REGULATIONS:

DOT Classification: Not Regulated
 DOT Proper Shipping Name: Not Regulated

Packing Group: N/A

CANADIAN TRANSPORTATION OF DANGEROUS GOODS: N/A

13. MISCELLANEOUS AND REGULATORY INFORMATION:

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, as well as oxygen and measures to support breathing manually or mechanically may be needed. Persistent convulsions may be controlled by the cautious intravenous injection of a short acting barbiturate drug.

CHEMICALS LISTED AS CARCINOGEN BY:

National Toxicology Program: No I.A.R.C.: No OSHA: No

FEDERAL REGULATIONS:

This is an EPA FIFRA registered pesticide (EPA Registration No. 47371-147-46269). This material can only be used in the EPA registered application (s) noted on the product label.

13. MISCELLANEOUS AND REGULATORY INFORMATION (Continued):**TOXIC SUBSTANCES CONTROL ACT (TSCA INVENTORY) STATUS:**

Found on U.S. EPA TSCA Inventory. While the C.A.S. number 8001-54-5 is not listed on the U.S. EPA TSCA inventory, an alternative CAS number for this material (68424-85-1) is listed on the TSCA inventory.

US EPA REGULATIONS ON PESTICIDES:

This is an EPA registered pesticide (EPA Registration No. 47371-130). This material can only be used commercially in the EPA registered application (s) listed on the product label.

CERCLA (Comprehensive Environmental Response, Compensation and Liability Act of 1980)

requires notification of the National Response Center (800-424-8802) in the event of a release of quantities of the following hazardous material contained in this product, if the release is equal to or greater than the Reportable Quantities (RQs) listed for the components in 40 CFR 302.4.

Chemical Name: None known.

SARA TITLE III, SECTIONS 302/304 (Superfund Amendments and Reauthorization Act of 1986):

This act requires emergency planning, including agency notification, for possible release of the following components of this material, based upon the Threshold Planning Quantities (TPQs) and release Reportable Quantities (RQs) listed in 40 CFR 355

Chemical Name: None known.

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:

<u>Chemical Name</u>	<u>C.A.S. No.</u>	<u>Hazard Category *)</u>
N, N-Didecyl-N,N-dimethylammonium chloride	7173-51-5	A
N-Alkyl (C ₁₂₋₁₆) -N,N-dimethyl-N- benzylammonium chloride	8001-54-5	A
Ethanol	64-17-5	F

*) 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

SARA TITLE III, SECTION 313:

This act requires submission of annual reports of the releases of the following components of this material if the reporting quantities as listed 40 CFR 372, are met or exceeded.

Chemical Name: None known.

CALIFORNIA PROPOSTION 65: Components present in this material which the State of California has found to cause cancer, birth defects, or other reproductive harm are as follows:

AS A CANCER HAZARD:

<u>Chemical Name</u>	<u>C.A.S. No.</u>	<u>Typical Max. Conc.</u>
Acetaldehyde	75-07-0	300 ppb
Benzene	71-43-2	30 ppm
Benzyl chloride	100-44-7	30 ppb
N-Nitrosodimethylamine	62-75-9	150 ppb
Propylene oxide	75-56-9	3.0 ppm

AS A REPRODUCTIVE HAZARD:

Benzene	71-43-2	30 ppm
Toluene	108-88-3	30 ppm

13. MISCELLANEOUS AND REGULATORY INFORMATION (Continued):

MASSACHUSETTS RIGHT-TO-KNOW: The following components of this material are included in the Massachusetts Substance List and are present at or above reportable levels:

<u>Chemical Name</u>	<u>C.A.S. No.</u>	<u>Typical Max. Conc.</u>
Acetaldehyde	75-07-0	300 ppb
Benzene	71-43-2	30 ppm
Benzyl chloride	100-44-7	30 ppb
Propylene oxide	75-56-9	3.0 ppm

MICHIGAN CRITICAL MATERIALS: The following components of this material are included in the Michigan Critical Materials List:

Chemical Name: None known.

NEW JERSEY RIGHT-TO-KNOW: The following components of this material are included in the New Jersey Hazardous Substance List and are present at or above reportable levels:

<u>Chemical Name</u>	<u>C.A.S. No.</u>	<u>Typical Max. Conc.</u>
N, N-Didecyl-N,N-dimethylammonium chloride	7173-51-5	4.85%
N-Alkyl (C ₁₂₋₁₆) -N,N-dimethyl-N- benzyl-ammonium chloride	8001-54-5	3.23%

PENNSYLVANIA RIGHT-TO-KNOW: The following components of this material are included in the Massachusetts Substance List and are present at or above reportable levels:

<u>Chemical Name</u>	<u>C.A.S. No.</u>	<u>Typical Max. Conc.</u>
Benzene	71-43-2	30 ppm

PREPARED BY: D. M. McFadden

DATE: 3/15/2005
Supersedes 2/18/04

The information and recommendations contained herein, are based upon data believed to be correct. No warranty, expressed or implied, is made.