

CK 4230

**MATERIAL SAFETY DATA SHEET 3M(TM) NEUTRAL QUAT DISINFECTANT CLEANER CONCENTRATE (Product No. 23, Twist 'n Fill(tm) System) 02/04/2008**



## Material Safety Data Sheet

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### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** 3M(TM) NEUTRAL QUAT DISINFECTANT CLEANER CONCENTRATE (Product No. 23, Twist 'n Fill(tm) System)

**MANUFACTURER:** 3M

**DIVISION:** Building & Commercial Services Division

**ADDRESS:** 3M Center  
St. Paul, MN 55144-1000

**EMERGENCY PHONE:** 1-800-364-3577 or (651) 737-6501 (24 hours)

**Issue Date:** 02/04/2008

**Supersedes Date:** 01/29/2008

**Document Group:** 24-1364-9

#### Product Use:

**Intended Use:** Disinfectant

**Specific Use:** EPA-registered, hospital grade quaternary disinfectant cleaner kills HIV-1, MRSA, VRE, Herpes Simplex I and II, and other pathogens. Rinse-free, low-foaming, neutral pH formula.

### SECTION 2: INGREDIENTS

| <u>Ingredient</u>                                                     | <u>C.A.S. No.</u> | <u>% by Wt</u> |
|-----------------------------------------------------------------------|-------------------|----------------|
| WATER                                                                 | 7732-18-5         | 60 - 90        |
| DIDECYL DIMETHYL AMMONIUM CHLORIDE                                    | 7173-51-5         | 10.14          |
| N-ALKYL (C14 50%, C12 40%, C16 10%) DIMETHYL BENZYL AMMONIUM CHLORIDE | 8001-54-5         | 6.76           |
| OCTYLDIMETHYLAMINE OXIDE                                              | 2605-78-9         | 1 - 5          |
| ETHYLENEDIAMINETETRAACETIC ACID                                       | 60-00-4           | 1 - 5          |
| ETHYL ALCOHOL                                                         | 64-17-5           | 1 - 5          |
| SODIUM HYDROXIDE                                                      | 1310-73-2         | 0.5 - 1.5      |
| D-LIMONENE                                                            | 5989-27-5         | <0.15          |

### SECTION 3: HAZARDS IDENTIFICATION

#### 3.1 EMERGENCY OVERVIEW

**Specific Physical Form:** Liquid

**Odor, Color, Grade:** Clear, light yellow to dark green color, fresh fragrance

**General Physical Form:** Liquid

**Immediate health, physical, and environmental hazards:** May cause chemical eye burns. May cause allergic skin reaction. May cause chemical skin burns. May cause chemical gastrointestinal burns. Contains a chemical or chemicals which can cause cancer. May cause target organ effects. Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

### 3.2 POTENTIAL HEALTH EFFECTS

**Eye Contact:**

**Corrosive (Eye Burns):** Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

**Skin Contact:**

**Corrosive (Skin Burns):** Signs/symptoms may include localized redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction.

**Allergic Skin Reaction (non-photo induced):** Signs/symptoms may include redness, swelling, blistering, and itching.

**Inhalation:**

**Respiratory Tract Irritation:** Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May be absorbed following inhalation and cause target organ effects.

**Ingestion:**

May be harmful or fatal if swallowed.

**Gastrointestinal Corrosion:** Signs/symptoms may include severe mouth, throat and abdominal pain; nausea; vomiting; and diarrhea; blood in the feces and/or vomitus may also be seen.

May be absorbed following ingestion and cause target organ effects.

**Target Organ Effects:**

**Central Nervous System (CNS) Depression:** Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Prolonged or repeated exposure may cause:

**Liver Effects:** Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice.

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

**NOTE:** This product contains ethanol. There are data associating human consumption of alcoholic beverages (ethanol) with developmental toxicity. This is not an expected effect during the foreseeable use of this product.

**Carcinogenicity:**

Contains a chemical or chemicals which can cause cancer.

**NOTE:** This product contains ethanol. In IARC published Monograph No. 44, entitled, "Alcohol Drinking", the carcinogenicity of ethanol was determined based on chronic exposure to ethanol through human consumption of alcoholic beverages. This is not an expected effect during the foreseeable use of this product.

**Ingredient**

**C.A.S. No.**

**Class Description**

**Regulation**

ETHYL ALCOHOL

64-17-5

Group 1

International Agency for Research on Cancer

### 3.3 POTENTIAL ENVIRONMENTAL EFFECTS

A 3M Product Environmental Data Sheet (PED) is available.

## SECTION 4: FIRST AID MEASURES

### 4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

**Eye Contact:** Immediately flush eyes with large amounts of water for at least 15 minutes. Get immediate medical attention.

**Skin Contact:** Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water for at least 15 minutes. Get immediate medical attention. Wash contaminated clothing and clean shoes before reuse.

**Inhalation:** Remove person to fresh air. If signs/symptoms develop, get medical attention.

**If Swallowed:** Do not induce vomiting. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get immediate medical attention.

## SECTION 5: FIRE FIGHTING MEASURES

### 5.1 FLAMMABLE PROPERTIES

Flash Point

200 °F [Test Method: Tagliabue Closed Cup]

OSHA Flammability Classification:

Class IIIB Combustible Liquid

### 5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

### 5.3 PROTECTION OF FIRE FIGHTERS

**Special Fire Fighting Procedures:** Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

**Unusual Fire and Explosion Hazards:** Non-flammable; ordinary combustible material.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Accidental Release Measures:** Refer to other sections of this MSDS for information regarding physical and health hazards,

respiratory protection, ventilation, and personal protective equipment. Call 3M-HELPS line (1-800-364-3577) for more information on handling and managing the spill. Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Ventilate the area with fresh air. Contain spill. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect as much of the spilled material as possible. Clean up residue with detergent and water. Place in a metal container approved for use in transportation by appropriate authorities. The container must be lined with polyethylene plastic or contain a plastic drum liner made of polyethylene. Cover, but do not seal for 48 hours. Dispose of collected material as soon as possible.

**In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.**

## **SECTION 7: HANDLING AND STORAGE**

### **7.1 HANDLING**

Keep out of the reach of children. This product is not intended to be used without prior dilution as specified on the product label. Avoid breathing of vapors, mists or spray. Avoid skin contact. Avoid eye contact. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Keep container closed when not in use.

### **7.2 STORAGE**

Store away from areas where product may come into contact with food or pharmaceuticals. Store away from acids. Avoid creasing or impacting container side walls.

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **8.1 ENGINEERING CONTROLS**

Use in a well-ventilated area. NOTE: When used as directed and diluted and dispensed with a TWIST 'n FILL(TM) Chemical Dispenser, special ventilation is not required.

### **8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)**

#### **8.2.1 Eye/Face Protection**

Avoid eye contact. NOTE: When used as directed and diluted and dispensed with a TWIST 'n FILL(TM) Chemical Dispenser, eye contact with the concentrate is not expected to occur.

If the product is not used with the Twist 'n Fill system or if there is an accidental release, the following eye protection is recommended: Full Face Shield, Indirect Vented Goggles.

#### **8.2.2 Skin Protection**

Avoid skin contact. NOTE: When used as directed and diluted and dispensed with a TWIST 'n FILL(TM) Chemical Dispenser, skin contact with the concentrate is not expected to occur.

If the product is not used with the Twist 'n Fill system or if there is an accidental release, select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials. Gloves made from the following material is recommended: Butyl Rubber, Neoprene, Nitrile Rubber. The following protective clothing material(s) are recommended: Apron - Neoprene, Boots - Neoprene.

#### **8.2.3 Respiratory Protection**

Avoid breathing of vapors, mists or spray. NOTE: When used as directed and diluted and dispensed with a TWIST 'n FILL(TM) Chemical Dispenser, respiratory protection is not required.

If the product is not used with the Twist 'n Fill system or if there is an accidental release, select one of the following NIOSH

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|----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>MATERIAL SAFETY DATA SHEET 3M(TM) NEUTRAL QUAT DISINFECTANT CLEANER CONCENTRATE (Product No. 23, Twist 'n Fill(tm) System) 02/04/2008</b> |
|----------------------------------------------------------------------------------------------------------------------------------------------|

approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half facepiece or fullface air-purifying respirator with organic vapor cartridges and N95 particulate prefilters. Consult the current 3M Respiratory Selection Guide for additional information or call 1-800-243-4630 for 3M technical assistance.

#### 8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

### 8.3 EXPOSURE GUIDELINES

| <u>Ingredient</u> | <u>Authority</u> | <u>Type</u> | <u>Limit</u>        | <u>Additional Information</u> |
|-------------------|------------------|-------------|---------------------|-------------------------------|
| ETHYL ALCOHOL     | ACGIH            | TWA         | 1000 ppm            | Table A-4                     |
| ETHYL ALCOHOL     | OSHA             | TWA         | 1000 ppm            | Table Z-1                     |
| SODIUM HYDROXIDE  | ACGIH            | CEIL        | 2 mg/m <sup>3</sup> |                               |
| SODIUM HYDROXIDE  | CMRG             | TWA         | 2 mg/m <sup>3</sup> |                               |
| SODIUM HYDROXIDE  | OSHA             | CEIL        | 2 mg/m <sup>3</sup> | Table Z-1A                    |
| SODIUM HYDROXIDE  | OSHA             | TWA         | 2 mg/m <sup>3</sup> | Table Z-1                     |

#### SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: American Conference of Governmental Industrial Hygienists

CMRG: Chemical Manufacturer Recommended Guideline

OSHA: Occupational Safety and Health Administration

AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

|                                                      |                                                          |
|------------------------------------------------------|----------------------------------------------------------|
| <b>Specific Physical Form:</b>                       | Liquid                                                   |
| <b>Odor, Color, Grade:</b>                           | Clear, light yellow to dark green color, fresh fragrance |
| <b>General Physical Form:</b>                        | Liquid                                                   |
| <b>Flash Point</b>                                   | 200 °F [Test Method: Tagliabue Closed Cup]               |
| <b>Boiling point</b>                                 | Approximately 212 °F                                     |
| <b>Density</b>                                       | Approximately 1 g/ml                                     |
| <b>Vapor Pressure</b>                                | 17.5 mmHg [@ 20 °C]                                      |
| <b>Specific Gravity</b>                              | Approximately 1 [Ref Std: WATER=1]                       |
| <b>pH</b>                                            | Approximately 7                                          |
| <b>Solubility in Water</b>                           | Complete                                                 |
| <b>Volatile Organic Compounds</b>                    | < 3 %                                                    |
| <b>VOC Less H<sub>2</sub>O &amp; Exempt Solvents</b> | < 110 g/l                                                |
| <b>Viscosity</b>                                     | 100 centipoise                                           |

## SECTION 10: STABILITY AND REACTIVITY

**Stability:** Stable.

**Materials and Conditions to Avoid:** Strong acids. Rapid heating and spattering of mixture may occur.

**Hazardous Polymerization:** Hazardous polymerization will not occur.

#### **Hazardous Decomposition or By-Products**

| <u>Substance</u>   | <u>Condition</u> |
|--------------------|------------------|
| Carbon monoxide    | Not Specified    |
| Carbon dioxide     | Not Specified    |
| Oxides of Nitrogen | Not Specified    |

### **SECTION 11: TOXICOLOGICAL INFORMATION**

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

### **SECTION 12: ECOLOGICAL INFORMATION**

#### **ECOTOXICOLOGICAL INFORMATION**

A 3M Product Environmental Data Sheet (PED) is available.

#### **CHEMICAL FATE INFORMATION**

A 3M Product Environmental Data Sheet (PED) is available.

### **SECTION 13: DISPOSAL CONSIDERATIONS**

**Waste Disposal Method:** Incinerate in a permitted hazardous waste incinerator in the presence of a combustible material. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility.

**EPA Hazardous Waste Number (RCRA):** Not regulated

Since regulations vary, consult applicable regulations or authorities before disposal.

### **SECTION 14: TRANSPORT INFORMATION**

| ID Number      | UPC              | ID Number      | UPC              |
|----------------|------------------|----------------|------------------|
| 70-0713-1495-2 | 00-48011-23890-1 | 70-0713-1498-6 | 00-48011-23552-8 |
| 70-0713-1499-4 | 00-48011-26056-8 | 70-0713-1500-9 | 00-48011-26057-5 |

Please contact the emergency numbers listed on the first page of the MSDS for Transportation Information for this material.

### **SECTION 15: REGULATORY INFORMATION**

#### **US FEDERAL REGULATIONS**

**311/312 Hazard Categories:**

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - Yes

**FIFRA**

Status  
Registered

Registration Number  
47371-129-10350

**STATE REGULATIONS**

**CHEMICAL INVENTORIES**

The components of this product are in compliance with the chemical notification requirements of TSCA.

All the components of this product are listed on China's Inventory of Chemical Substances.

The components of this product are in compliance with notification requirements in the Philippines.

The components of this product are listed on the Canadian Domestic Substances List.

**INTERNATIONAL REGULATIONS**

This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**SECTION 16: OTHER INFORMATION**

**NFPA Hazard Classification**

Health: 3 Flammability: 1 Reactivity: 0 Special Hazards: None  
Corrosive: Yes

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

**HMIS Hazard Classification**

Health: 3 Flammability: 1 Reactivity: 0 Protection: X - See PPE section.

Hazardous Material Identification System (HMIS®) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint and Coatings Association (NPCA).

**Revision Changes:**

Section 13: EPA hazardous waste number (RCRA) information was modified.

Section 1: Initial issue message was modified.

Section 2: Ingredient table was modified.

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## Transport Information Document

Date: November 11, 2009

3M ID Number: 70-0713-1499-4

Product Description: 23L 3M(TM) Neutral Quat Disinfectant Cleaner Concentrate 23L, Black Cap, 2 Liter, 6/case

Transport Protective Service: PROTECTIVE SERVICE NOT REQUIRED

NMFC Item: 048580

NMFC Sub: 03

NMFC Class: 055.0

Flash Point (Closed-cup): 200°F/93°C

|                                                                       |
|-----------------------------------------------------------------------|
| UNITED STATES DEPARTMENT OF TRANSPORTATION - GROUND (U.S. DOT 49 CFR) |
| CONSUMER COMMODITY, ORM-D                                             |

  

|                                                           |
|-----------------------------------------------------------|
| UNITED STATES DEPARTMENT OF TRANSPORTATION - VESSEL (DOT) |
| CONSUMER COMMODITY, ORM-D                                 |

  

|                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------|
| INTERNATIONAL AIR TRANSPORTATION (IATA)                                                                                               |
| UN1903, DISINFECTANT, LIQUID, CORROSIVE, N.O.S., (ALKYLDIMETHYLBENZYL AMMONIUM CHLORIDE AND DIDECYLDIMETHYLAMMONIUM CHLORIDE), 8, III |

  

|                                                                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| INTERNATIONAL AIR TRANSPORTATION (IATA)                                                                                                                 |
| UN1903, DISINFECTANT, LIQUID, CORROSIVE, N.O.S., (ALKYLDIMETHYLBENZYL AMMONIUM CHLORIDE AND DIDECYLDIMETHYLAMMONIUM CHLORIDE), 8, III, LIMITED QUANTITY |

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