



Material Safety Data Sheet

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3M™ QUAT DISINFECTANT CLEANER CONCENTRATE (Product No. 5, Twist 'n Fill™ System)
MANUFACTURER: 3M
:
DIVISION: Building & Commercial Services Division
ADDRESS: 3M Center, St. Paul, MN 55144-1000
St. Paul, MN
55144-1000

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

Issue Date: 07/26/13
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Document Group: 17-9553-3

Product Use:

Intended Use: Disinfectant
Specific Use: EPA-registered, quaternary disinfectant cleaner for use in hospitals.

SECTION 2: INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>% by Wt</u>
WATER	7732-18-5	60 - 90
ETHOXYLATED C12-C15 ALCOHOLS	68131-39-5	5 - 10
BENZYL-C12-16-ALKYL DIMETHYL AMMONIUM CHLORIDES	68424-85-1	5 - 10
OCTYLDECYLDIMETHYLAMMONIUM CHLORIDE	32426-11-2	5 - 10
ETHYL ALCOHOL	64-17-5	1 - 5
SODIUM METASILICATE	6834-92-0	1 - 5
EDTA TETRASODIUM SALT	64-02-8	1 - 5
DIDECYLDIMETHYLAMMONIUM CHLORIDE	7173-51-5	1 - 5
DIOCTYL DIMETHYL AMMONIUM CHLORIDE	5538-94-3	1 - 5

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Liquid

Odor, Color, Grade: Clear; green color; pleasant fragrance.

General Physical Form: Liquid

Immediate health, physical, and environmental hazards: Combustible liquid and vapor. May cause chemical eye burns. May cause chemical skin burns. May cause chemical gastrointestinal burns. May cause target organ effects.

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:

May be harmful if absorbed through skin. Corrosive (Skin Burns): Signs/symptoms may include localized redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction.

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 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:

Kidney/Bladder Effects: Signs/symptoms may include changes in urine production, abdominal or lower back pain, increased protein in urine, increased blood urea nitrogen (BUN), blood in urine, and painful urination.

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

NOTE: This product contains ethanol. There are data associating human consumption of alcoholic beverages with developmental toxicity, and the California Environmental Protection Agency has classified ethanol in alcoholic beverages as a developmental toxicant (for purposes of Proposition 65). Exposure to ethanol during the foreseeable use of this product is not expected to cause developmental toxicity.

NOTE: This product contains ethanol. Alcoholic beverages and ethanol in alcoholic beverages have been classified as human carcinogens by the International Agency for Research on Cancer, the U.S. National Toxicology Program, and the California Environmental Protection Agency (for purposes of Proposition 65). Exposure to ethanol during the foreseeable use of this product is not expected to cause cancer.

3.3 POTENTIAL ENVIRONMENTAL EFFECTS

A 3M Product Environmental Data Sheet (PED) is available. A conservative assessment of this product indicates that its use and proper disposal are likely to present a low environmental risk. Potential use and misuse are unlikely to cause components to enter the environment in quantities or by routes that could cause adverse environmental impacts.

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.

4.2 NOTE TO PHYSICIANS

Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression, and convulsion may be needed.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Autoignition temperature	<i>No Data Available</i>
Flash Point	Approximately 133 °F [<i>Test Method:</i> Tagliabue Closed Cup]
Flammable Limits(LEL)	<i>No Data Available</i>
Flammable Limits(UEL)	<i>No Data Available</i>
OSHA Flammability Classification:	Class II 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: Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

Unusual Fire and Explosion Hazards: Combustible liquid and vapor.

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Remove all ignition sources such as flames, smoking materials, and electrical spark sources. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Remember, adding an absorbent material does not remove a toxic, corrosivity or flammability hazard.

6.2. Environmental precautions

For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of 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. Place in a container approved for transportation by appropriate authorities, but do not seal the container for 48 hours to avoid pressure build-up. Dispose of collected material as soon as possible.

6.3. Clean-up methods

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. Contain spill. Cover spill area with a fire-extinguishing foam designed for use on solvents, such as alcohols and acetone, that can dissolve in water. An AR - AFFF type foam is recommended. For large spills, if necessary, get assistance from professional spill clean up team. For small spills, carefully neutralize spill by adding appropriate dilute acid such as vinegar. Work slowly to avoid boiling or splattering. Continue to add neutralizing agent until reaction stops. Let cool before collecting. Or use a commercially available caustic (alkaline or basic) spill clean-up kit. Follow kit directions exactly. 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 using non-sparking tools. Clean up residue with water.

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. Do not get in eyes, on skin or on clothing. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Keep away from heat, sparks, open flame, pilot lights and other sources of ignition. No smoking while handling this material. Avoid contact with oxidizing agents. Avoid creasing or impacting side walls.

7.2 STORAGE

Store away from areas where product may come into contact with food or pharmaceuticals. Store away from heat. Store out of direct sunlight. Store away from acids. Store away from oxidizing agents.

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

Do not get in eyes. 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: Indirect Vented Goggles and Full Face Shield.

8.2.2 Skin Protection

Do not get on skin or on clothing. 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.

8.2.3 Respiratory Protection

Avoid breathing of vapors, mists or spray. Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection. 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, an exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure: Fullface air-purifying respirator with organic vapor cartridges. For questions about suitability for a specific application, consult with your respirator manufacturer.

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	STEL	1000 ppm	
ETHYL ALCOHOL	OSHA	TWA	1900 mg/m3	

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

Specific Physical Form:	Liquid
Odor, Color, Grade:	Clear; green color; pleasant fragrance.
General Physical Form:	Liquid
Autoignition temperature	<i>No Data Available</i>
Flash Point	Approximately 133 °F [<i>Test Method:</i> Tagliabue Closed Cup]
Flammable Limits(LEL)	<i>No Data Available</i>
Flammable Limits(UEL)	<i>No Data Available</i>
Boiling Point	Approximately 212 °F
Density	1.0 [<i>Ref Std:</i> WATER=1]
Vapor Pressure	<=27 psia [@ 131 °F]
Specific Gravity	1.001 - 1.009 [<i>Ref Std:</i> WATER=1]
pH	12.2 - 13.2
Solubility in Water	Complete
Evaporation rate	<i>No Data Available</i>
Volatile Organic Compounds	3 - 7 % [<i>Test Method:</i> calculated per CARB title 2]
Kow - Oct/Water partition coef	<i>No Data Available</i>
Percent volatile	< 70
VOC Less H2O & Exempt Solvents	80 - 188 g/l [<i>Test Method:</i> calculated per CARB title 2]
Viscosity	17.3 - 22.5 sec

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid:

10.1 Conditions to avoid: Not determined

10.2 Materials to avoid: Strong acids

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: Dispose of waste product in a permitted hazardous waste facility.

EPA Hazardous Waste Number (RCRA): D001 (Ignitable), D002 (Corrosive), D018 (Benzene)

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

SECTION 14: TRANSPORT INFORMATION

ID Number	UPC	ID Number	UPC
70-0711-2639-8	00-48011-34719-6	70-0711-2640-6	00-48011-34720-2
70-0711-2641-4	00-48011-34721-9	70-0711-2642-2	00-48011-34722-6

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS

311/312 Hazard Categories:

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

FIFRA

Status

Registered

Registration Number

6836-78-10350

STATE REGULATIONS

CHEMICAL INVENTORIES

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

All applicable chemical ingredients in this material are listed on the European Inventory of Existing Chemical Substances (EINECS), or are exempt polymers whose monomers are listed on EINECS.

The components of this material are in compliance with the new chemical notification requirements for the Korean Existing Chemicals Inventory.

The components of this product are listed on the Australian Inventory of Chemical Substances.

The components of this product are listed on Japan's Chemical Substance Control Law List (also known as the Existing and New Chemical Substances List.)

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

This product complies with the New Zealand Hazardous Substances and New Organisms Act (1996).

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

All components of this product are listed on the Inventory of Existing Chemical Substances in China or are exempt.

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: 2 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: 2 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).

Reason for Reissue: The MSDS has been revised because 3M has adopted the 16-section ANSI/ISO format. The potential hazards of the product have not changed. We encourage you to reread the MSDS and review the information.

Revision Changes:

Section 1: Product name was modified.

Section 1: Product use information was modified.

Section 8: Respiratory protection comment was modified.

Section 16: Disclaimer (second paragraph) was modified.

Section 3: Potential effects from skin contact information was modified.

Section 3: Potential effects from ingestion information was modified.

Section 7: Handling information was modified.

Section 7: Storage information was modified.

Section 8: Engineering controls information was modified.

Section 8: Eye/face protection phrase was modified.

Section 8: Skin protection phrase was modified.

Section 8: Respiratory protection information was modified.

Section 10: Hazardous decomposition or by-products table was modified.

Section 13: Waste disposal method information was modified.

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

Section 3: Carcinogenicity phrase was modified.

Section 3: Immediate other hazard(s) was modified.
Section 14: Transportation legal text was modified.
Section 3: Other health effects information was modified.
Section 16: HMIS explanation was modified.
Page Heading: Product name was modified.
Section 15: Inventories information was modified.
Section 9: Density information was modified.
Section 9: Vapor pressure value was modified.
Section 9: Boiling point information was modified.
Section 5: Flash point information was modified.
Section 9: Property description for optional properties was modified.
Section 9: Specific gravity information was modified.
Section 9: pH information was modified.
Section 9: Solubility in water text was modified.
Section 9: Flash point information was modified.
Section 3: Other health effects information (reproductive hazards) was modified.
Section 12: Ecotoxicological phrase was modified.
Section 12: Chemical Fate phrase was modified.
Section 14: ID Number(s) and/or UPC(s) Template 1 was modified.
Section 2: Ingredient table was modified.
Section 15: FIFRA information was modified.
Section 8: Exposure guidelines ingredient information was modified.
Section 5: Flammable limits (UE) information was added.
Section 5: Flammable limits (LEL) information was added.
Section 5: Autoignition temperature information was added.
Section 9: Flammable limits (LEL) information was added.
Section 9: Flammable limits (UEL) information was added.
Section 9: Autoignition temperature information was added.
Section 6: 6.2. Environmental precautions heading was added.
Section 6: 6.1. Personal precautions, protective equipment and emergency procedures heading was added.
Section 10.1 Conditions to avoid heading was added.
Section 10.2 Materials to avoid heading was added.
Section 16: Web address was added.
Section 6: Personal precautions information was added.
Section 6: Environmental procedures information was added.
Section 6: Methods for cleaning up information was added.
Section 10: Materials to avoid physical property was added.
Section 10: Conditions to avoid physical property was added.
Section 1: Address was added.
Copyright was added.
Company logo was added.
Section 6: Clean-up methods heading was added.
Telephone header was added.
Company Telephone was added.
Section 1: Emergency phone information was added.
Section 1: Emergency phone information was deleted.
Section 3: Other potential health effects comment for reproduction was deleted.
Company Logo was deleted.
Copyright was deleted.
Section 16: Web address heading was deleted.
Section 6: Release measures information was deleted.
Section 6: Release measures heading was deleted.
Section 10: Materials and conditions to avoid physical property was deleted.
Section 1: Address line 1 was deleted.
Section 1: Address line 2 was deleted.

Section 3: Carcinogenicity table was deleted.

Section 3: Carcinogenicity heading was deleted.

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