

MATERIAL SAFETY  
DATA SHEET

3M  
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DIVISION: COMMERCIAL CARE DIVISION

TRADE NAME:

3M Brand QUAT DISINFECTANT CLEANER CONCENTRATE (Product No. 5, Twist  
'n Fill (tm) System)

ID NUMBER/U.P.C.:

70-0707-2960-6 00-48011-23218-3 70-0707-2961-4 00-48011-23219-0  
70-0708-3993-4 00-48011-23218-3 70-0708-3994-2 00-48011-23219-0  
70-0710-0962-8 00-48011-23884-0 70-0710-0964-4 00-48011-23904-5

ISSUED: December 03, 2001

SUPERSEDES: July 16, 2001

DOCUMENT: 06-1685-4

| 1. INGREDIENT  | C.A.S. NO. | PERCENT |
|--|------------|---------|
| WATER.....   | 7732-18-5  | 60 - 90 |
| BENZYL-C12-16-ALKYLDIMETHYL AMMONIUM<br>CHLORIDES..... | 68424-85-1 | 8.68    |
| OCTYLDECYLDIMETHYLAMMONIUM CHLORIDE.....               | 32426-11-2 | 6.51    |
| BRANCHED-NONYLPHENOL, ETHOXYLATE.....                  | 68412-54-4 | 5 - 10  |
| ETHYL ALCOHOL.....                                     | 64-17-5    | 1 - 5   |
| DIDECYLDIMETHYLAMMONIUM CHLORIDE.....                  | 7173-51-5  | 3.906   |
| TETRASODIUM ETHYLENEDIAMINETETRAACETATE.....           | 64-02-8    | 1 - 5   |
| DIOCTYL DIMETHYL AMMONIUM CHLORIDE.....                | 5538-94-3  | 2.604   |
| SODIUM METASILICATE.....                               | 6834-92-0  | 1 - 5   |

IN CASE OF EMERGENCY: THE NUMBERS AT THE TOP OF THIS PAGE PROVIDE 24  
HOUR RESPONSE FROM ANY PHONE FOR ALL EMERGENCIES WITH THIS PRODUCT.

2. PHYSICAL DATA

BOILING POINT:..... ca. 212 F  
VAPOR PRESSURE:..... N/D  
VAPOR DENSITY:..... N/D  
EVAPORATION RATE:..... N/D  
SOLUBILITY IN WATER:..... complete  
SPECIFIC GRAVITY:..... ca. 1.00 Water=1  
PERCENT VOLATILE:..... 65 - 80 %  
pH:..... ca. 12.6

Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

1325

NOT REUSE DISTRICT

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DISINFECTANT

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2. PHYSICAL DATA (continued)  
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VISCOSITY:..... < 100 centipoise  
MELTING POINT:..... N/A

APPEARANCE AND ODOR:  
Liquid, clear, green color, pleasant odor.

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3. FIRE AND EXPLOSION HAZARD DATA  
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FLASH POINT:..... 133 F TCC  
FLAMMABLE LIMITS - LEL:..... N/D  
FLAMMABLE LIMITS - UEL:..... N/D  
AUTOIGNITION TEMPERATURE:..... N/D

EXTINGUISHING MEDIA:  
Water, Carbon dioxide, Dry chemical, Foam

SPECIAL FIRE FIGHTING PROCEDURES:  
Wear full protective clothing, including helmet, self-contained,  
positive pressure or pressure demand breathing apparatus, bunker coat  
and pants, bands around arms, waist and legs, face mask, and  
protective covering for exposed areas of the head.

UNUSUAL FIRE AND EXPLOSION HAZARDS:  
See Hazardous Decomposition section for products of combustion.  
Closed containers exposed to heat from fire may build pressure and  
explode.

NFPA HAZARD CODES: HEALTH: 3 FIRE: 2 REACTIVITY: 0  
UNUSUAL REACTION HAZARD: corrosive

OSHA FIRE HAZARD CLASS: Class III Combustible Liquid

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4. REACTIVITY DATA  
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STABILITY: Stable

INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID:  
Strong Acids.

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS:  
Carbon Monoxide and Carbon Dioxide, Oxides of Nitrogen, Hydrogen  
Chloride.

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5. ENVIRONMENTAL INFORMATION

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SPILL RESPONSE:

Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Ventilate area. Extinguish all ignition sources. Contain spill. Evacuate unprotected personnel from hazard area. Cover with inorganic absorbent material. Dilute in a large excess of water. Carefully, and with stirring, add appropriate dilute acid such as sulfamic acid or vinegar. Confirm neutrality. Collect using non-sparking tools. Clean up residue with water. Place in a polyethylene-lined metal container. Do not seal for 48 hours.

RECOMMENDED DISPOSAL:

Incinerate in a permitted hazardous waste incinerator. Combustion products will include HCl.

ENVIRONMENTAL DATA:

A Product Environmental Data Sheet (PED) is available.

This product is a disinfectant; it is toxic to microorganisms. Care must be taken to avoid improper disposal or release to the environment. When properly handled, use of this product is expected to have minimal environmental impact. Most components of this product will eventually degrade in the environment.

REGULATORY INFORMATION:

Volatile Organic Compounds: < 60 gms/liter calculated per CARB title 2 section 94507.  
VOC Less H<sub>2</sub>O & Exempt Solvents: < 200 gms/liter calculated per CARB title 2 section 94507.

Since regulations vary, consult applicable regulations or authorities before disposal. In the event of an uncontrolled release of this material, the user should determine if the release qualifies as a reportable quantity. U.S. EPA Hazardous Waste Number = D001 (Ignitable) D002 (Corrosive)

TSCA: All components used in the manufacture of this material are in compliance with the US TSCA inventory.

EPCRA HAZARD CLASS:

FIRE HAZARD: Yes PRESSURE: No REACTIVITY: No ACUTE: Yes CHRONIC: Yes

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Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

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#### 6. SUGGESTED FIRST AID

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##### EYE CONTACT:

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

##### SKIN CONTACT:

Immediately flush skin with large amounts of water for at least 15 minutes in a chemical safety shower while removing contaminated clothing and shoes. Get immediate medical attention. Wash contaminated clothing before reuse.

##### INHALATION:

If signs/symptoms occur, remove person to fresh air. If signs/symptoms continue, call a physician.

##### IF SWALLOWED:

If swallowed, do NOT induce vomiting. Give victim two glasses of water. Call a physician immediately. Never give anything by mouth to an unconscious person.

Note to physician: Probable mucosal damage may contraindicate the use of gastric lavage.

##### OTHER FIRST AID INFORMATION:

Measures against circulatory shock, respiratory depression, and convulsion may be needed.

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#### 7. PRECAUTIONARY INFORMATION

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##### EYE PROTECTION:

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. Avoid eye contact. The following should be worn alone or in combination, as appropriate, to prevent eye contact: Wear vented goggles. Wear full-face shield.

##### SKIN PROTECTION:

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. Avoid skin contact. Wear appropriate gloves when handling this material. A pair of gloves made from the following material(s) are recommended: butyl rubber, neoprene, nitrile rubber. Use one or more of the following personal protection items as necessary to prevent skin contact: apron, coveralls.

7. PRECAUTIONARY INFORMATION (continued)

RECOMMENDED VENTILATION:

NOTE: When used as directed and diluted and dispensed with a TWIST'n FILL (tm) Chemical Dispenser, special ventilation is not required. Use in a well-ventilated area. Provide sufficient ventilation to maintain emissions below recommended exposure limits. If exhaust ventilation is not adequate, use appropriate respiratory protection.

RESPIRATORY PROTECTION:

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

PREVENTION OF ACCIDENTAL INGESTION:

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

Avoid contamination of food.

RECOMMENDED STORAGE:

Store away from areas where product may come into contact with food or pharmaceuticals. Do not store containers on their sides. Keep container closed when not in use. Keep out of the reach of children.

FIRE AND EXPLOSION AVOIDANCE:

Keep container tightly closed. Keep away from heat, sparks, open flame, and other sources of ignition. Combustible liquid and vapor.

OTHER PRECAUTIONARY INFORMATION:

This product is not intended to be used without prior dilution as specified on the product label.

Avoid creasing or impacting container side walls.

HMIS HAZARD RATINGS: HEALTH: 3 FLAMMABILITY: 2 REACTIVITY: 0  
PERSONAL PROTECTION: X (See precautions, section 7.)

EXPOSURE LIMITS

| INGREDIENT   | VALUE | UNIT | TYPE | AUTH  | SKIN* |
|--|-------|------|------|-------|-------|
| WATER.....   | NONE  | NONE | NONE | NONE  |       |
| BENZYL-C12-16-ALKYLDIMETHYL<br>AMMONIUM CHLORIDES..... | NONE  | NONE | NONE | NONE  |       |
| OCTYLDECYLDIMETHYLAMMONIUM<br>CHLORIDE.....            | NONE  | NONE | NONE | NONE  |       |
| BRANCHED-NONYLPHENOL, ETHOXYLATE.....                  | NONE  | NONE | NONE | NONE  |       |
| ETHYL ALCOHOL.....                                     | 1000  | PPM  | TWA  | ACGIH |       |
| ETHYL ALCOHOL.....                                     | 1000  | PPM  | TWA  | OSHA  |       |

Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

EXPOSURE LIMITS (continued)

| INGREDIENT                            | VALUE | UNIT | TYPE | AUTH | SKIN* |
|---------------------------------------|-------|------|------|------|-------|
| DIDECYLDIMETHYLAMMONIUM CHLORIDE..... | NONE  | NONE | NONE | NONE |       |
| TETRASODIUM                           |       |      |      |      |       |
| ETHYLENEDIAMINETETRAACETATE.....      | NONE  | NONE | NONE | NONE |       |
| DIOCTYL DIMETHYL AMMONIUM CHLORIDE... | NONE  | NONE | NONE | NONE |       |
| SODIUM METASILICATE.....              | NONE  | NONE | NONE | NONE |       |

\* SKIN NOTATION: Listed substances indicated with 'Y' under SKIN refer to the potential contribution to the overall exposure by the cutaneous route including mucous membrane and eye, either by airborne or, more particularly, by direct contact with the substance. Vehicles can alter skin absorption.

SOURCE OF EXPOSURE LIMIT DATA:

- ACGIH: American Conference of Governmental Industrial Hygienists
- OSHA: Occupational Safety and Health Administration
- NONE: None Established

8. HEALTH HAZARD DATA

EYE CONTACT:

Chemical Related Eye Burns (chemical corrosivity): signs/symptoms can include cloudy appearance of the cornea, chemical burns, pain, tearing, ulcers, impaired vision or loss of vision.

SKIN CONTACT:

Skin Burns (chemical corrosivity): signs/symptoms can include redness, swelling, itching, pain, blistering, ulceration, sloughing, and scar formation.

May be absorbed through the skin and produce effects similar to those caused by inhalation and/or ingestion.

INHALATION:

Single overexposure, above recommended guidelines, may cause:

Central Nervous System Depression: signs/symptoms can include headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness.

Irritation (upper respiratory): signs/symptoms can include soreness of the nose and throat, coughing and sneezing.

Prolonged or repeated exposure may cause:

Lung Damage: signs/symptoms can include coughing, difficulty breathing, wheezing, tightness in chest, congestion, and coughing up of blood.

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8. HEALTH HAZARD DATA (continued)  
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IF SWALLOWED:

Harmful or fatal if swallowed.

Damage to Gastrointestinal Tissues: signs/symptoms can include pain, vomiting, nausea, abdominal tenderness, burns of mouth, difficulty swallowing, blood in vomitus, blood in feces, and ulceration.

REPRODUCTIVE/DEVELOPMENTAL TOXINS:

WARNING: This product contains ethanol. Ethanol is listed under Proposition 65 as a reproductive hazard through human consumption of alcoholic beverages. This is not an expected effect during the foreseeable use of this product. Ethanol in alcoholic beverages can cause birth defects or other reproductive harm.

OTHER HEALTH HAZARD INFORMATION:

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.

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SECTION CHANGE DATES  
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HEALTH HAZARD DATA SECTION CHANGED SINCE July 16, 2001 ISSUE

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