

MSDS: A0452

12 RTG05L
ITEM: 4HN94

DROP LOCATION: L2-293

ORDER: 0075743298

APR 09 2001

MATERIAL SAFETY DATA SHEET (MSDS)

This MSDS should be attached or kept with the respective product with which it is associated.

MATERIAL SAFETY DATA SHEET - A0452

Associated Grainger Items

4HN94, 4HN95

MATERIAL SAFETY 3M

DATA SHEET 3M CENTER

ST. PAUL, MINNESOTA

55144-1000

1-800-364-3577 OR (651) 737-6501 (24 HOURS)

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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.:

- 70-0705-2687-9 00-48011-19158-9 70-0705-2688-7 00-48011-19159-6
- 70-0705-4317-1 00-48011-19206-7 70-0705-4318-9 00-48011-19207-4
- 70-0705-8962-0 00-48011-19965-3 70-0705-8963-8 00-48011-19966-0
- 70-0707-1405-3 00-48011-20793-8 70-0707-1406-1 00-48011-20794-5
- 70-0707-2960-6 00-48011-23218-3 70-0707-2961-4 00-48011-23219-0
- 70-0707-2962-2 00-48011-23220-6 70-0707-2963-0 00-48011-23221-3

ISSUED: JANUARY 21, 1998

SUPERSEDES: DECEMBER 08, 1997

DOCUMENT: 06-1685-4

1. INGREDIENT	C.A.S. NO.	PERCENT
WATER.....	7732-18-5	60 - 70
ALKYL (C-14 50%, C-12 40%, C-16 10%)		
DIMETHYL BENZYL AMMONIUM CHLORIDE.....	68424-85-1	8.7
OCTYLDECYLDIMETHYLAMMONIUM CHLORIDE.....	32426-11-2	6.5
NONYLPHENOXYPOLY (OXYETHYLENE) ETHANOL....	9016-45-9	5 - 10
ETHYL ALCOHOL.....	64-17-5	1 - 5
DIDECYLDIMETHYLAMMONIUM CHLORIDE.....	7173-51-5	3.9
ETHYLENEDIAMINETETRAACETIC ACID		
TETRASODIUM SALT.....	64-02-8	1 - 5
DIOCTYL DIMETHYL AMMONIUM CHLORIDE.....	5538-94-3	2.6
SODIUM METASILICATE.....	6834-92-0	1 - 5
FRAGRANCE.....	UNKNOWN	0.5 - 1.5
DYE.....	UNKNOWN	< .1

1 HOUR RESPONSE FROM ANY PHONE FOR ALL EMERGENCIES WITH THIS PRODUCT.

ABBREVIATIONS: N/D - NOT DETERMINED N/A - NOT APPLICABLE CA - APPROXIMATELY

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(PRODUCT NO. 5, TWIST 6N FILL (TM) SYSTEM)

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 - 70 %
PH:..... CA. 12.6
VISCOSITY:..... < 100 CENTIPOISE
MELTING POINT:..... N/A
APPEARANCE AND ODOR:

LIQUID, CLEAR, GREEN COLOR, PLEASANT ODOR.

3. FIRE AND EXPLOSION HAZARD DATA

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.
USE FRESH AIR RESPIRATOR.

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 II COMBUSTIBLE LIQUID

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4. REACTIVITY DATA

STABILITY: STABLE

INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID:

HIGHLY ALKALINE MATERIAL. AVOID MIXING WITH STRONGLY ACIDIC
MATERIALS. RAPID HEATING AND SPATTERING OF MIXTURE MAY RESULT.

HAZARDOUS POLYMERIZATION: HAZARDOUS POLYMERIZATION WILL NOT OCCUR.

HAZARDOUS DECOMPOSITION PRODUCTS:

CARBON MONOXIDE AND CARBON DIOXIDE, OXIDES OF NITROGEN, HYDROGEN
CHLORIDE.

5. ENVIRONMENTAL INFORMATION

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: CA. 40 GMS/LITER SOUTH COAST AIR QUALITY MGMT DIST METHOD RULE 443.1, CALCULATED.
VOC LESS H2O & EXEMPT SOLVENTS: CA. 40 GMS/LITER SOUTH COAST AIR QUALITY MGMT DIST METHOD (RULE 443.1, CALCULATED).
SINCE REGULATIONS VARY, CONSULT APPLICABLE REGULATIONS OR AUTHORITIES BEFORE DISPOSAL. IN THE EVENT OF AN UNCONTROLLED RELEASE OF THIS

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5. ENVIRONMENTAL INFORMATION (CONTINUED)

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

6. SUGGESTED FIRST AID

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.

7. PRECAUTIONARY INFORMATION

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:

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7. PRECAUTIONARY INFORMATION (CONTINUED)

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.

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:

NOT INTENDED FOR CONSUMER SALE OR USE. 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.)

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7. PRECAUTIONARY INFORMATION (CONTINUED)

EXPOSURE LIMITS

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
WATER.....	NONE	NONE	NONE	NONE	
ALKYL (C-14 50%, C-12 40%, C-16 10%) DIMETHYL BENZYL AMMONIUM CHLORIDE.....	NONE	NONE	NONE	NONE	
OCTYLDECYLDIMETHYLAMMONIUM CHLORIDE.....	NONE	NONE	NONE	NONE	
NONYLPHENOXYPOLY(OXYETHYLENE)ETHANOL L.....	NONE	NONE	NONE	NONE	
ETHYL ALCOHOL.....	1000	PPM	TWA	ACGIH	
ETHYL ALCOHOL.....	1000	PPM	TWA	OSHA	
DIDECYLDIMETHYLAMMONIUM CHLORIDE.....	NONE	NONE	NONE	NONE	
ETHYLENEDIAMINETETRAACETIC ACID TETRASODIUM SALT.....	NONE	NONE	NONE	NONE	
DICTYL DIMETHYL AMMONIUM CHLORIDE...	NONE	NONE	NONE	NONE	
SODIUM METASILICATE.....	NONE	NONE	NONE	NONE	
FRAGRANCE.....	NONE	NONE	NONE	NONE	
DYE.....	NONE	NONE	NONE	NONE	

* SKIN NOTATION: LISTED SUBSTANCES INDICATED WITH δ 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/SYMPOMS 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/SYMPOMS 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.

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8. HEALTH HAZARD DATA (CONTINUED)

INHALATION:

SINGLE OVEREXPOSURE, ABOVE RECOMMENDED GUIDELINES, MAY CAUSE:

CENTRAL NERVOUS SYSTEM DEPRESSION: SIGNS/SYMPOMS CAN INCLUDE HEADACHE, DIZZINESS, DROWSINESS, INCOORDINATION, SLOWED REACTION TIME, SLURRED SPEECH, GIDDINESS AND UNCONSCIOUSNESS.

IRRITATION (UPPER RESPIRATORY): SIGNS/SYMPOMS CAN INCLUDE SORENESS OF THE NOSE AND THROAT, COUGHING AND SNEEZING.

PROLONGED OR REPEATED EXPOSURE MAY CAUSE:

NERVOUS SYSTEM EFFECTS: SIGNS/SYMPOMS CAN INCLUDE EMOTIONAL CHANGES, LACK OF COORDINATION, TREMORS AND SENSORY LOSS.

LUNG DAMAGE: SIGNS/SYMPOMS CAN INCLUDE COUGHING, DIFFICULTY BREATHING, WHEEZING, TIGHTNESS IN CHEST, CONGESTION, AND

COUGHING UP OF BLOOD.

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.

OTHER HEALTH HAZARD INFORMATION:

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: MEDICAL CONDITIONS, IF ANY, KNOWN TO BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT ARE INDICATED IN THE APPROPRIATE PORTIONS OF THE HEALTH HAZARD DATA SECTION OF THIS DATA SHEET.

CARCINOGENS: COMPONENTS OF THIS PRODUCT, IF ANY, KNOWN TO CAUSE, OR SUSPECTED OF CAUSING, CANCER AS DETERMINED BY OSHA, IARC, OR NTP ARE DESCRIBED IN THE HEALTH HAZARD DATA SECTION OF THIS DATA SHEET IN ACCORD WITH THE OSHA HAZARD COMMUNICATIONS STANDARD, 29 CFR 1910.1200

SECTION CHANGE DATES

INGREDIENTS SECTION CHANGED SINCE DECEMBER 08, 1997 ISSUE

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