

MILITARY SPECIFICATIONS PROMULGATED BY MILITARY -- LIQUID CHLORINE -- 6830-00-281-3464

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Product Identification
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Product ID:LIQUID CHLORINE

MSDS Date:10/30/1996

FSC:6830

NIIN:00-281-3464

MSDS Number: CCBZT

=== Responsible Party ===

Company Name:MILITARY SPECIFICATIONS PROMULGATED BY MILITARY

Address:DEPTS/AGENCIES UNDER AUTH OF DEFENSE STD

Box:MANUAL

City:4120 3-M

Country:US

Preparer's Name:HMIS-VBA

ame:HMIS-VBA

CAGE:81349

=== Contractor Identification ===

Company Name:MILITARY SPECIFICATIONS PROMULGATED BY MILITARY

Address:DEPTS/AGENCIES UNDER AUTH OF DEF STD

Box:MANUAL

City:4120 3-M

Phone:804-279-4371 DSN 695-4371

CAGE:81349

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Composition/Information on Ingredients
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Ingred Name:CHLORINE (SARA III)

CAS:7782-50-5

RTECS #:FO2100000

Fraction by Wt: 100%

Other REC Limits:NONE SPECIFIED

OSHA PEL:(C) 1 PPM

ACGIH TLV:0.5 PPM/1 STEL; 9293

EPA Rpt Qty:10 LBS

DOT Rpt Qty

:10 LBS

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Hazards Identification
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Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:INHALATION:SEVERE RESPIRATORY

IRRITATION, FEELING OF SUFFOCATION. SEVERE EXPOSURE MAY CAUSE
PNEUMONITIS & PULMONARY EDEMA, DENTAL EROSION, REDUCED PULMONARY
CAPACITY. INGESTION:UNLIKELY. SKIN:BURNS,BLISTERS. EYES: EXTREME
IRRITATION, BURNS. CHRONIC:>TLV, REDUCED

LUNG CAPACITY OR LUNG
DAMAGE.

Explanation of Carcinogenicity:NOT LISTED AS A CARCINOGEN BY NTP OR
IARC.

Effects of Overexposure:INHALATION:SEVERE RESPIRATORY IRRITATION,
COUGHING,BURNING,CHEST PAIN,VOMITING,HEADACHE,ANXIETY & FEELING OF
SUFFOCATION. SEVERE EXPOSURE PNEUMONITIS & PULMONARY EDEMA, DENTAL
EROSION, REDUCED PULMONA RY CAPACITY. SKIN:BURNS, BLISTERS. EYES:
EXTREME IRRITATION, BURNS.

Medical Cond Aggravated by Exposure:PULMONARY DISORDERS.

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=== First Aid Measures =====

First Aid:EYE:FLUSH W/WATER FOR 15 MIN. SEE PHYSICIAN IMMEDIATELY.
SKIN:FLUSH W/WATER. INHALATION: REMOVE FROM EXPOSURE. ADMINISTER
OXYGEN UNTIL BREATHING IS EASY. GET IMMEDIATE MEDICAL ATTENTION.
INGESTED:UNLI KELY, NOTHING BY MOUTH IF UNCONSCIOUS. IF IRRITATION
PERSISTS OR IS SEVERE SEE DOCTOR.

===== Fire Fighting Measures =====

Lower Limits:NONFLAMMABLE

Upper Limits:NONFLAMMABLE

Extinguishing

Media:USE WATER TO KEEP CONTAINERS COOL & DIRECT AWAY
FUMES. WEAR FULL PROTECTIVE CLOTHING. USE MEDIA FOR SURROUNDING
FIRE.

Fire Fighting Procedures:REMOVE CONTAINERS FROM FIRE ZONE IMMEDIATELY,
UNLESS LEAKING. TOW TANK CARS & BARGES FROM DANGER AREA. WEAR
SELF-CONTAINED BREATHING APPARATUS.

Unusual Fire/Explosion Hazard:CONTAINERS WILL EXPLODE IN THE HEAT OF
FIRE.

===== Accidental Release Measures =====

Spill Release Procedures:IF >10 LB (RQ),
REPORT SPILL. KEEP UPWIND &
VENTILATE AREA. WEAR FULL PROTECTIVE EQUIPMENT & SHUT OF LEAK AT
SOURCE. CONTAIN LIQUID & PREVENT DISCHARGE TO STREAMS & SEWERS.
CONTROL LOSS OF VOLITILES T O ATMOSPHERE. DO NOT APPLY WATER TO
LEAK.

Neutralizing Agent:DILUTE SOLUTION OF SODABICARBONATE.

===== Handling and Storage =====

Handling and Storage Precautions:STORE IN WELL VENTILATED AREA W/LOW
FIRE POTENTIAL & AWAY FROM INCOMPATIBLES. KEEP AWAY FROM HE

AT &

SOURCE OF IGNITION. PROTECT FROM WEATHER & DAMAGE.

Other Precautions:AVOID INHALATION OF VAPORS & BODY CONTACT AS MOISTURE FORMS WEAK ACID. TRAIN WORKERS IN CHLORINE HANDLING. KEEP CHLORINE HANDLING SYSTEMS FREE OF ORGANICS, CLEAN, DRY & PROTECTED FROM FIRE.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:USE NIOSH APPROVED ACID GAS CHEMICAL CARTRIDGE RESPIRATOR OR FULL FACE W/CANISTER. USE SUPPLIED AIR RESPIRATOR IN POSITIVE PRESSURE MODE FOLLOWING ANSI Z117-1977 FOR TANK & CONFINED SPACE ENTRY.

Ventilation:GENERAL OR LOCAL DEPENDING UPON THE LEVELS.

Protective Gloves:IMPERVIOUS (LATEX & RUBBER RECOMMENDED)

Eye Protection:CHEMICAL GOGGLES & FACE SHIELD

Other Protective Equipment:HIGH CONCENTRATIONS:FULL BODY PROTECTION. LIGHT CONCENTRATIONS:TYVEC SUIT SEALED AT NECK, WRISTS, ANKLES IS FUNCTIONAL.

Work Hygienic Practices:USE STRICT CHEMICAL HYGIENE PRACTICES. AVOID CONTACT IF AT ALL POSSIBLE. WASH THOROUGHLY AFTER HANDLING.

Supplemental Safety and Health

DANGER! POISON GAS! HAZARDOUS LIQUID & GAS UNDER PRESSURE. MAY CAUSE CHEMICAL PNEUMONIA & DEATH IN HIGH CONCENTRATIONS. MAY CAUSE SEVERE IRRITATION TO EYES, SKIN & RESPIRATORY TRACT. LIQUID MAY BURN EYES & SKIN. CAN REACT EXPLOSIVELY W/ORGANIC PRODUCTS. TOXIC TO FISH. NSN FOR EMPTY CYLINDER IS 8120-00-285-4722.

===== Physical/Chemical Properties =====

HCC:G7

NRC/State Lic Num:NONE

Boiling Pt

:B.P. Text:-29F,-34C

Melt/Freeze Pt:M.P/F.P Text:-148F,-100C

Vapor Pres:2748 MM

Vapor Density:2.4

Spec Gravity:1.4

Solubility in Water:0.7%

Appearance and Odor:AMBER COLOR LIQUID, GREENISH-YELLOW GAS. PUNGENT IRRITATING ODOR.

Percent Volatiles by Volume:100

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

REDUCING AGENTS,COMBUSTIBLE MATERIAL. KEEP AWAY FROM

HYDROCARBONS,AMMONIA,HYDROGEN,ETHER,POWDERED METALS,SULFUR,ALUMINUM

Stability Condition to Avoid:AVOID RELEASING GAS. DO NOT PLACE NEAR
HEAT/ FIRE. NEVER USE WATER ON CHLORINE LEAK.

Hazardous Decomposition Products:NONE

Conditions to Avoid Polymerization:WILL NOT OCCUR.

===== Disposal Considerations =====

Waste Disposal Methods:REMOVE LEAKING CONTAINER TO ISOLATED AREA.
RETURN TO MANUFACTURER. FOLLOW LOCAL, STATE AND FEDERAL
REGULATIONS.

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