

# **CHLORINE**

## **MSDS Number**

**BHCZN** 

#### **National Stock Number**

6830-00-169-0786

## **Product Name**

**CHLORINE** 

#### Manufacturer

PENNWALT CORP

## **Product Identification**

Product ID:CHLORINE MSDS Date:07/25/1988 FSC:6830 NIIN:00-169-0786 MSDS Number: BHCZN

# **Responsible Party**

PENNWALT CORPORATION

THREE PARKWAY

PHILADELPHIA, PA 19102

US

Emergency Phone: 24HR#1 206-627-9101/#2 503-228-7655

Info Phone: 503-238-7230 Preparer: JAMES E. FIKE

Cage: 7K913

Contractor

# PENNWALT CORPORATION/ELF ATOCHEM NORTH AMERICA

PHILADELPHIA, PA 19102

215-587-7711 Cage: 7K913

# **Ingredients**

CHLORINE (SARA III)

CAS: 7782-50-5 RTECS: FO2100000

Fraction By Weight: 99%

OSHA PEL(C) 1 PPM

ACGIH TLV: 0.5 PPM/1 STEL; 9293

EPA Report Quantity: 10 LBS DOT Report Quantity: 10 LBS

## **Hazards**

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:EYE EFFECTS: MAY CAUSE BLINDNESS.
CAPABLE OF CAUSING A BURN, REDNESS, TEARING, AND IRRITATION OF THE
EYES. SKIN EFFECTS: CORROSIVE, CAPABLE OF CAUSING A BURN.CHLORINE
VAPORS CAN CAUSE IRRITATION, BU RNING AND BLISTERS. CHLORINE IS



ARESPIRATORY IRRITANT. CAN CAUSE IRRITATION OF NOSE AND MUCOUS MEMBRANE.

Effects of Overexposure:SYMPTOMS INCLUDE HEADACHE, COUGHING, NAUSEA, VOMITING, DIZZINESS, SHORTNESS OF BREATH AND CHEST PAIN. PULMONARY EDEMA AND CHEMICAL PNEUMONIA CAN DEVELOP & MAY OCCUR HOURS AFTER EXPOSURE. EXTENSIVE E XPOSURE CAN CAUSE UNCONSCIOUSNESS ANDDEATH. Medical Cond Aggravated by Exposure:ASTHMA, BRONCHITIS, EMPHYSEMS, AND OTHER LUNG DISEASES AND CHRONIC NOSE, SINUS OR THROAT CONDITIONS.

#### First Aid

First Aid:MEDICAL ATTENTION MANDATORY. INGESTION: INDUCE VOMITING & GIVE PLENTY OF WATER.SKIN: WASH WITH SOAP & WATER, REMOVE/LAUNDER CONTAMINATED CLOTHING. EYE CONTACT:FLUSH WITH PLENTY OF WATER FOR 15 MIN. I NHILATION: REMOVE TO FRESH AIR, IF NOTBREATHING GIVE CPR. KEEP PATIENT WARM, AT REST, COMFORTABLE. DO NOT ATTEMPT TO REMOVE SOMEONE FROM A CHLORINE ATMOSPHERE WITHOUT WEARING S.C.B.A.

#### Fire Fighting

Fire Fighting Procedures: REMOVE CHLORINE CONTAINERS FROM FIRE ZONE IF POSSIBLE. APPLY WATER TO COOL CON-TAINERS EXCEPT IF CHLORINE IS ESCAPING. IF TEMP EXCEED 130F SPRAY CONT/AVIOD LEAK Unusual Fire/Explosion Hazard: MANY METALS IGNITE IN PRESENCE OF CHLORINE W/EXPLOSIVE REACTION UPON CONTACT WITH EASILY OXIDIZED MATERIALS, ORGANIC MATERIALS & OTHER FLAMMABLES.

#### **Accidental Release**

Spill Release Procedures: KEEP UPWIND. EVACUATE AREA. WEAR PROTECTIVE GEAR &S.C.B.A. ISOLATE LEAK. IF CHLORINE CONTAINER IS LEAKING, TRY TO POSITION IT SO THAT GAS RATHER THANLIQUID LEAKS. SPILLS OF CHLORINE OF 10LBS OR MORE MUST BE REPORTED TO NATIONAL RESPONSE CENTER.

Neutralizing Agent: CAUSTIC SODA, SODA ASH, OR HYDRATED LIME SOLUTIONS.

#### Handling

Handling and Storage Precautions: DO NOT DROP CONTAINER. KEEP IMMOBILIZED WHEN IN USEDO NOT ATTEMPT TO HANDLE, STORE, OR USE CHLORINE W/OCOMPLETE REVIEW OF CHLORINE TO INSTITUTE'S MANUAL Other Precautions: DO NOT EAT, DRINK, OR SMOKE IN WORK AREA. WASH HANDS PRIOR TO EATING, DRINKING, OR USING THE RESTROOM. WEAR RESPIRATOR WHILE OPERATING VALVES AND CONNECTING OR DISCONNECTING LINES. MONITOR TO DETERMIN E EXPOSURE LEVELS.

#### **Exposure Controls**

Respiratory Protection: UP TO 25 PPM CHEMICAL CARTRIDGE (ACID GAS) RESPIRATOR WITH FULL FACE-PIECE OR USE SELF-CONTAINED BREATHING APPARATUS; OVER 25 PPM (OR UNKNOWN CONCENTRATION) SELF-CONTAINED BREATHING APPARATUS OR EQ UIVALENT.

Ventilation: USE WITH ADEQUATE VENTILATION. SUFFICIENT TO CONTROL BELOW PEL.CHLORINE HEAVIER THAN AIR, VENTS SHOULD BE FLOOR LEVEL. Protective Gloves: ANY PLASTIC OR RUBBER NON-PORUS GLOVES.

Eye Protection: GOGGLES W/FACE SHIELD.NO CONTACT LENSES.

Other Protective Equipment: PROTECTIVE CLOTHING FOR EXPOSURE TO LIQUID CHLORINE OR HIGH CONCENTRATIONS OF GAS.FIREMAN'S TURN OUT CLOTHING RECOMMENDE

Supplemental Safety and Health

# **Chemical Properties**

Boiling Pt:B.P. Text:-29F/-34C

Melt/Freeze Pt:M.P/F.P Text:-149F/-101C

Vapor Pres:\*SEE BELOW Vapor Density:2.5 STP Spec Gravity:1.467/32F (0C)

Solubility in Water: .71% @ 1 ATM, 70F/21C

Appearance and Odor: GREENISH YELLOW GAS - SHARPLY PENETRATING ODOR

SIMILAR TO BLEACH PUNGENT.



Percent Volatiles by Volume:99

# **Stability**

Stability Indicator/Materials to Avoid:YES
AVOID TURPENTINE, ETHER, AMMONIA, HYDROCARBONS,CERTAIN METALHYDRIDES,
EASILY OXIDIZED MATERIALS,ORGANIC & OTHER FLAMMABL
Stability Condition to Avoid:NK \*VAP PRES: 85 PSIG @ 70F (21.1C)
Conditions to Avoid Polymerization:AVOID HEAT

# **Disposal**

Waste Disposal Methods: CHLORINE GAS WILL DISPERSE TO THE ATMOSPHERE LEAV-ING NO RESIDUE. DO NOT APPLY NEUTRALIZING AGENTS DIRECTLY ONTO LIQUID CHLORINE SPILL. LIQUID AND/ORSOLID RESIDUES FROM NEUTRALIZATION MUST BE DISPOSE OF IN A PERMITTED WASTE MANAGEMENT FACILITY.

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