

**MATERIAL SAFETY DATA SHEET (MSDS)**

MANUFACTURER/DISTRIBUTOR NAME: H&S MANUFACTURING, INC.  
ADDRESS: 727 EAST BROADWAY  
WILLISTON, ND 58801  
EMERGENCY TELEPHONE NUMBER: CONTACT YOUR LOCAL POISON  
INFORMATION CENTER.  
TECHNICAL (24HR) PHONE: 800/ 827-3091  
EFFECTIVE DATE: 1/1/2004

PRODUCT NAME: **CHLORINE CONCENTRATE**IDENTIFICATION

HAZARDOUS COMPOSITION (>1%): SODIUM HYPOCHLORITE (<6%)  
INERT INGREDIENTS (>94%) CHEMICAL FORMULA: N/A  
MOLECULAR WEIGHT: N/A CAS NUMBER: 7681-52-9  
CTFA ADOPTED NAME: N/A SYNONYMS: N/A

HMIS: HEALTH 0/0  
FIRE 0/0  
REACTIVITY 1/1  
SPECIAL N/A

PHYSICAL DATA

BOILING POINT( DEGREES F): 217 MELTING POINT: N/A VAPOR DENSITY (AIR=1): 19.2  
FREEZING POINT: N/A SPECIFIC GRAVITY (WATER=1): 1.087 SATURATION IN AIR:  
N/A VAPOR PRESSURE (MM HG.): 16 PH: 12.4 EVAPORATION RATE(\*=1): N/A  
AUTO IGNITION TEMP: N/A VOLATILES BY WEIGHT (%): 88  
SOLUBILITY IN WATER: COMPLETE APPEARANCE/ODOR: PALE YELLOW LIQUIL WITH TYPICAL  
LIQUID BLEACH ODOR.  
FLASH POINT (F)/METHOD USED: N/A FLAMMABLE LIMITS(LEL/UEL): N/A

REACTIVITY

STABILITY: UNSTABLE CONDITIONS TO AVOID: SEE INCOMPATIBILITY BELOW.  
POLYMERIZATION (HAZERDOUS): WILL NOT OCCUR INCOMPATIBLE MATERIALS: ACIDS,  
AMMONIA, ORGANIC COMPOUNDS, HEAVY METALS AND SALTS THEREOF, AND OXIDIZING OR  
REDUCING COMPOUNDS.  
HAZARDOUS DECOMPOSITION PRODUCTS: CHLORINE, CHLORIND DIOXIDE, CHLORAMINES

ENVIRONMENTAL IMPACT

APPLICABLE REGULATIONS: N/A DOT/ERP HAZARD CLASS: N/A  
SHIPPING NAME: SEE PRODUCT NAME

HEALTH HAZARD DATA

PERMISSIBLE EXPOSURE LIMITS (PEL): N/A THRESHOLD LIMIT VALUES (TLV): N/A  
WARNING SIGNALS: RESPIRATORY, OCULAR IRRITATION  
EFFECTS OF OVER EXPOSURE: INHALATION: RESPIRATORY TRACT IRRITATION, PULMONARY EDEMA.  
INGESTION: MAY CAUSE BURNING SENSATION & IRRITATION OF MUCOUS MEMBRANES WITH  
PROMPTEMESIS. SKIN: VESICULAR ERUPTIONS AND EXZEMATOID DERMATITUS. EYES: IRRITATION-  
MILD TO MODERATE FROM VAPORS.

EXPOSURE CONTROL METHODS

ENGINEERING: NONE EYE PROTECTION: NONE SKIN PROTECTION: NONE RESPIRATORY  
PROTECTION: NONE

WORK PRACTICES

HANDLING: USE NORMAL PRECAUTIONS FOR HANDLING CAUSTIC SUBSTANCES.  
STORAGE: SHOULD BE STORED BELOW 90 DEGREES F. SHOULD NOT BE EXPOSED TO DIRECT  
SUNLIGHT FOR EXTENDED PERIODS OF TIME.  
WASTE DISPOSAL: FLUSH WITH WATER TO SEWER IN ACCORDANCE WITH FEDERAL, STATE AND  
LOCAL ORDINANCES.  
CHLORINE CONCINTRATE CONT...

EMERGENCY PROCEDURES

FIRE & EXPLOSION HAZARD: BLEACH DECOMPOSES WHEN HEATED TO HIGH TEMPERATURES: USE  
RESPIRATORY PROTECTION. DECOMPOSITION PRODUCTS MAY CAUSE: CONTAINERS TO RUPTURE.  
EXTINGUISHING METHODS: N/A RELEASE: TO ENVIRONMENT/SPILL PROCEDURES: AVOID

FUMES FROM SPILLED LIQUIDS, DILUTE COPIOUSLY.

FIRST AID AND MEDICAL EMERGENCY PROCEDURES

EYES: RINSE THOROUGHLY WITH WATER, SEEK MEDICAL ASSISTANCE

SKIN: RINSE THOROUGHLY WITH WATER

INHALATION: REMOVE TO FRESH AIR, SUPPORT RESPIRATION

INGESTION: SWALLOW IMMEDIATELY MILK, EGG WHITE, MILK OF MAGNESIA, OR STARCH PASTE.