

Product ID:SODA BLEACH SOLUTION MSDS Date:08/19/1996 FSC:6810 NIIN:01-029-5565 Status Code:A MSDS Number: CJNQQ === Responsible Party === Company Name: KREVIT H CO INC Address:73 WELTON STREET Box:9433 City:NEW HAVEN State:CT ZIP:06534 Country:US Info Phone Num:203-772-3350 Emergency Phone Num:800-922-662 6 Resp. Party Other MSDS Num.:0236 CAGE:66894 === Contractor Identification === Company Name: INDUSTRIAL CHEMICAL COMMODITIES INC Address:15944 DERWOOD RD Box:City:ROCKVILLE State:MD ZIP:20855 Country:US Phone:800-284-5279 Contract Num:SP0450-99-M-NB61 CAGE:1ELU0 Company Name: KREVIT H CO INC Address:73 WELTON STREET Box:9433 City:NEW HAVEN State:CT ZIP:06534 Country:US Phone:203-772-3350 CAGE:66894

Ingred Name:SODIUM HYPOCHLOR

ITE (CERCLA) (AS AVAILABLE CHLORINE) CAS:7681-52-9 RTECS #:NH3486300 Minumum % Wt:5. Maxumum % Wt:15. Other REC Limits:NONE RECOMMENDED EPA Rpt Qty:100 LBS DOT Rpt Qty:100 LBS

Ingred Name:SODIUM HYDROXIDE (CERCLA) CAS:1310-73-2 RTECS #:WB4900000 = Wt:1. Other REC Limits:NONE RECOMMENDED OSHA PEL:2 MG/M3 ACGIH TLV:C 2 MG/M3; 9596 EPA Rpt Qty:1000 LBS DOT Rpt Qty:1000 LBS

Ingred Name:WATER CAS:7732-18-5 RTECS #:ZC0110000 Fraction by Wt: BALANCE Other REC Limits:NONE RECOMMENDED

LD50 LC50 Mixture:LD50 (ORAL, RAT) 8.91 MG/KG (12% SOLN) Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:TARGET ORGANS: EYES, SKIN, RESPIRATORY SYSTEM (HMIS). ACUTE: CORROSIVE. INHALATION:. MIST OR FUMES CAN CAUSE BRONCHIAL IRRITATION, COUGH, DIFFICULT BREATHING, INFLAMMATION OF MOUTH, NAUSEA, AND PULMO NARY EDEMA. EYE/SKIN: LIQUEFIED CONTACTCAN PRODUCE IRRITATION OF SKIN WITH BLISTERING AND

ECZEMA. DIRECT CONTACT WITH EYES MAY CAUSE REDNESS, PAIN, PERMANENT DAMAGE. INGESTION: FEW OUNCES CAN CAUSE CO RROSION OF MUCOUS MEMBRANES, SWELLING OF THROAT, PERFORATION OF ESOPHAGUS AND STOMACH, VOMITING, COLITIC HYPOTENSION, CIRCULATORY COLLAPSE, CONVULSIONS, COMA OR DEATH. AT 15%, AS LITTLE AS 1 OZ MAY BE LETHAL. CHRONIC: NOT CARCINOGENIC.

Effects of Overexposure:CORROSIVE. MIST OR FUMES CAN CAUSE BRONCHIAL IRRITATION, COUGH, DIFFICULT BREATHING, INFLAMMATIO

N OF MOUTH,

NAUSEA, AND PULMONARY EDEMA. CONTACT CAN PRODUCE IRRITATION OF SKIN WITH BLISTERING AND ECZE MA. DIRECT CONTACT WITH EYES MAY CAUSE REDNESS, PAIN, PERMANENT DAMAGE. INGESTION OF FEW OUNCES CAN CAUSE CORROSION OF MUCOUS MEMBRANES, SWELLING OF THROAT, PERFORATION OF ESOPHAGUS AND STOMACH, VOMIT ING, COLITIC HYPOTENSION, CIRCULATORY COLLAPSE, CONVULSIONS, COMA OR DEATH. AT 15% CONCENTRATION, AS LITTLE AS 1 OZ MAY BE LETHAL. Medical Cond Aggravated by Exposure :NONE SPECIFIED BY MANUFACTURER.

First Aid:INHALATION: REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION, PREFERABLY MOUTH-TO-MOUTH. IF BREATHING IS DIFFICULT, GIVE OXYGEN. CALL A PHYSICIAN. EYE OR SKIN CONTACT: FLUSH EYES AN D SKIN WITH PLENTY OF WATER FOR AT LEAST15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES. IF IRRITATION OCCURS, CONSULT A PHYSICIAN. THOROUGHLY CLEAN CLOTHI NG AND SHOES

BEFORE REUSE OR DISCAR D. INGESTION: IF CONSCIOUS, DRINK LARGE QUANTITIES OF WATER. DO NOT INDUCE VOMITING. TAKE IMMEDIATELY TO A HOSPITAL OR PHYSICIAN. DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

Flash Point:NONFLAMMABLE

Fire Fighting Procedures: FIREFIGHTERS SHOULD WEAR NIOSH/MSHA APPROVED PRESSURE-DEMAND SELF CONTAINED BREATHING APPARATUS. USE WATER SPRAY TO COOL FIRE-EXPOSED CONTAINERS.

Unusual Fire/Explosion Hazard:CAN DECOMPOSE TO FORM IRRITATING CHLORINE GAS AND OXYGEN.

Spill Release Procedures: IMMEDIATELY EVACUATE AREA. PROVIDE MAXIMUM VENTILATION. WEAR PROTECTIVE EQUIPMENT. LARGE SPILLS: RECOVER SPILLED MATERIAL ON ADSORBENTS SUCH AS VERMICULITE. SWEEP INTO CLOSED CONTAINERS FOR DISPOSAL. DO NOT USE COMBUSTIBLE SUCH AS SAWDUST.THOROUGHLY WET VACUUM AREA. DO NOT FLUSH TO

SEWER. SMALL SPILLS (LESS THAN 10 GALLONS): DILUTE WITH LARGE AMOUNT OF WATER AND THEN FLUSH TO SANITARY SEWER. Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

Handling and Storage Precautions: WHEN HANDLING, WEAR GLOVES, SAFETY GOGGLES AND RESPIRATORY PROTECTION. STORE IN A COOL, DRY, WELL-VENTILATED AREA. AVOID EXCESSIVE STORAGE TEMPERATURES AND DIRECT SUNLIGHT. STORE AWAY FROM ACIDS AND O RGANICS. STOR E ONLY IN

CLOSED, PROPERLYLABELED CONTAINERS.

Other Precautions: AVOID CONTACT WITH EYES AND SKIN. MAY CAUSE BURNS TO EYES AND SKIN. AVOID INHALAION OF VAPORS, MISTS AND FUMES. USE WITH ADEQUATE VENTILATION. VENTILATION MUST BE SUFFICIENT TO MINIMIZE EMPLOYEE EXPOS URE TO SODIUM HYPOCHLORITE. WASH THOROUGHLY AFTER HANDLING. DO NOT SWALLOW. DO NOT EAT, DRINK OR SMO KE IN WORK AREA.

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

Respiratory Protection:USE

A HALF OR FULL FACEPIECE ACID GAS CHEMICAL

CARTRIDGE RESPIRATOR WHEN EXPOSURES TO SODIUM HYPOCHLORITE ARE LIKELY. AN APPROPRIATE PARTICULATE PRE-FILTER IS ALSO REQUIRED WHEN MISTS ARE PRESENT. SIM ILAR PROTECTION SHOULD BE WORN WHILE CLEANING UP SPILLS OR LEAKS IF IRRITATION OCCURS. RESPIRATORS MUST BE APPROVED BY NIOSH/MSHA.

Ventilation: USE LOCAL OR GENERAL VENTILATION TO MINIMIZE EMPLOYEE EXPOSURES AS NECESSARY.

Protective Gloves: NEOPRENEE OR NITRILE GLOVES

Eye Protecti

on:SPLASH-PROOF CHEMICAL GOGGLES.

Other Protective Equipment: USE RUBBER/PLASTIC BOOTS, APRON OR CHEMICAL SUITS WHEN NECESSARY TO PREVENT SKIN CONTACT.

Work Hygienic Practices: WASH THOROUGHLY AFTER HANDLING. AVOID CONTACT WITH EYES AND SKIN, INHILATION OF VAPORS/MISTS/FUMES. DO NOT EAT, DRINK OR SMOKE IN WORK AREA.

Supplemental Safety and Health

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NOTES TO PHYSICIAN: DO NOT ADMINISTER ACIDIC ANTIDOTES OR SODIUM BICARBONATE FOLLOWING SODIUM HYPOCHLORITE OVEREXPOSURE. AN OUNCE OF 1% S

ODIUM THIOSULFATE OR MILK OF MAGNESIA IS HELPFUL.

HCC:B1 Boiling Pt:B.P. Text:DECOMPOSES Melt/Freeze Pt:=-14.C, 6.8F Decomp Temp:Decomp Text:@760MMHG Vapor Pres:17.5MMHG@20C Spec Gravity:1.21@ 20C(H20=1) pH:APPROX 13 Evaporation Rate & amp; Reference:1 (WATER = 1) Solubility in Water:COMPLETE Appearance and Odor:CLEAR, PALE YELLOW OR GREENISH LIQUID WITH A CHLORINE ODOR Percent Volatiles by Volume:100%

Stability Indicator/Materials to Avoid:YES

 AVOID MIXING WITH ACIDS(LIBERATES CHLORINE), AMMONIA, UREA, OXIDIZING MATERIALS, METALS SUCH AS NICKEL, COPPER, TIN, MANGANESE, IRON (WHICH CAUSE LIBERATION OF OXYGEN).
Stability Condition to Avoid:NONE
Hazardous Decomposition Products:IN A FIRE SODIUM HYPOCHLORITE MAY DECOMPOSE PRODUCING IRRITATING CHLORINE GAS, OXYGEN.

То

xicological Information:TOXICITY DATA: LC50 INHALATION: NOT ESTABLISHED. LD50 DERMAL: NOT ESTABLISHED. SKIN/EYE IRRITATION: (RAT) 8.91 MG/KG (12% SOLUTION). FISH, LC50 (LETAHL CONCENTRATION): UNKNOWN.

Waste Disposal Methods:THE MANUFACTURER RECOMMENDES DISPOSAL IN AN APPROVED HAZARDOUS WASTE MANAGEMENT FACILITY. CARE MUST BE TAKEN WHEN USING OR DISPOSING OF CHEMICAL, MATERIALS AND/OR THEIR CONTAINERS TO

PREVENT ENVIRONME NTAL CONTAMINATION. IT IS YOUR DUTY TO DISPOSE OF THE CHEMICAL MATERIALS AND/OR THEIR CONTAINERS IN ACCORDANCE WITH ALL REGULATIONS REGARDING DISPOSAL

SARA Title III Information: A. 311/312 CATEGORIES - ACUTE AND REACTIVITY, B. NOT LISTED IN SECTION 313, C. NOT LISTED AS AN "EXTREMELY HAZARDOUS SUBSTANCE" IN SECTION 302. CERCLA: LISTED IN TABLE 302.4 OF 40 CFR PART 302 AS A H AZARDOUS S

UBSTANCE WITH A

REPORTABLE QUANTITY OF 100 POUNDS. RELEASES TO AIR, LAND OR WATER WHICH EXCEED THE R.Q. MUST BE REPORTED TO THE NATIONAL RESPONSE CENTER, 1-800-424-8801.

Federal Regulatory Information: TSCA: SODIUM HYPOCHLORITE IS ON THE TSCA INVENTORY UNDER CAS # 7681-52-9.

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