MATERIAL SAFETY DATA SHEET

SECTION I - COMPANY AND PRODUCT INFORMATION Product SKU Number:..... 331, 334 EPA Reg. Number:..... 7616-45 Manufacturer's Name:..... Chem Lab Products, Inc. Emergency Telephone No.:.... (909) 390-9912/(800)424-9300(CHEMTREC) Street Address:..... 5160 E. Airport Drive City/State/Zip code:..... Ontario, CA 91761 Chemical Name and Synonyms:... Sodium Hypochlorite, Bleach Trade Name and Synonyms:..... KEM TEK KEMKLOR II CHLORINATING LIQUID Chemical Family:..... Alkali Hypochlorite Formula:..... NaOCl CAS # 07647-01-0 NFPA Rating: Health: 2 Flammability: 0 Reactivity: 1 Special: DOT Proper Shipping Name:.... Consumer commodity DOT Hazard Class:.... ORM-D Package Group:..... III SECTION II - HAZARDOUS INGREDIENTS HAZARDOUS INGREDIENTS: SODIUM HYPOCHLORITE (7681-52-9:UN1791)...... 10.0% - 11.0% SODIUM HYDROXIDE (1310-73-2; UN1823) 0.7% - 0.9% NONHAZARDOUS INGREDIENTS: SODIUM CHLORIDE..... 10.0% - 11.0% SECTION III - PHYSICAL DATA FREEZING POINT..... 20°F DECOMPOSITION TEMPERATURE... N/A BOILING POINT 218°F BULK DENSITY (loose)..... N/A SPECIFIC GRAVITY 1.160-1.180 pH (in 1% solution)......N/A рн 12 SOLUBILITY IN WATER..... N/A VAPOR PRESSURE (cm Hg.) 12-17 @ 20°C MOLECULAR WEIGHT..... 74.45 % VOLATILE BY VOLUME 0 APPEARANCE..... Light Yellow EVAPORATION RATE (____=1)..... N/A ODOR..... Chlorine odor VAPOR DENSITY (Air = 1)..... 2.61 SECTION IV - FIRE AND EXPLOSION HAZARD DATA FLASH POINT..... Non-flammable FLAMMABLE LIMITS..... N/A EXTINGUISHING MEDIA...... Flood with water or Carbon Dioxide (CO_2) . SPECIAL FIRE FIGHTING PROCEDURES: Must wear NIOSH certified gas mask with canister for chlorine. UNUSUAL FIRE AND EXPLOSION HAZARDS: Material is strong oxidizer; contact with combustibles may initiate or promote combustion. Acid and heat accelerate decomposition. Decomposition Products may include chlorine. SECTION V - HEALTH HAZARD DATA THRESHOLD LIMIT VALUE:..... N/A EFFECTS OF OVEREXPOSURE: INGESTION - causes irritation of the mouth, throat, and stomach. SKIN - severe

irritation. INHALATION - severe irritation. EYE - severe irritation.

EMERGENCY AND FIRST AID PROCEDURES:

IF SWALLOWED: Drink large quantities of milk or gelatin solution, or if these are not available, drink large quantities of water. Do not give vinegar or other acids. Do not induce vomiting. Get prompt medical attention. IF IN EYES: Flush with a steady, gentle stream of water for 15 minutes. Get medical attention. IF ON **SKIN:** Wash with plenty of soap and water. **IF INHALED:** Remove victim to fresh air. Call physician if exposure is severe.

SECTION VI - REACTIVITY DATA

STABILITY: This Product is stable

CONDITIONS TO AVOID:

Light, heat, fire, low pH, metallic impurities, naturally decomposes with age.

INCOMPATIBILITY: (Materials to avoid)

Acid, ammonia, amines, cyanides, chlorinated isocyanurates, combustibles,

detergents, reducing agents, oxidizable materials.

HAZARDOUS DECOMPOSITION PRODUCTS:.. Contact with acid will releases chlorine gas; natural decomposition Products is oxygen. Thermal decomposition or burning may produce HCl.

HAZARDOUS POLYMERIZATION:..... WILL NOT OCCUR

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE OF MATERIAL RELEASED OR SPILLED:

Material is toxic to fish. Contain in diked area. Neutralize with sodium sulfite, sodium thiosulfate, or ferrous salt solutions. Dilute copiously with water.

WASTE DISPOSAL METHOD:

This material is toxic to fish. Do not contaminate water by cleaning equipment or disposal of wastes. Untreated effluent should not be discharged where it will drain into lakes, streams, or ponds. Dispose of waste in facility permitted for non-hazardous waste.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: (Specify type)

Use MSHA-NIOSH approved respirator for dusts, mists, and fumes with TLV not less than .05 $\rm mg/m^3$

VENTILATION:

LOCAL EXHAUST: Desirable.

PROTECTIVE GLOVES: Rubber Gloves
EYE PROTECTION: Use chemical goggles

OTHER PROTECTIVE EQUIPMENT:

Rubber splash apron. Safety shower and eyewash should be located nearby.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

Store upright in cool, day area away from direct sunlight and excessive heat. Do not store near other incompatible household Products. Do not store next to Acid.

OTHER PRECAUTIONS: Rinse empty container thoroughly with plenty of water. Do not contaminate food, feed, or water by store, disposal, or cleaning of equipment. Wash contaminated clothing before reuse. Discard contaminated shoes.

This data is offered in good faith as typical values and not as a product specification. No warranty, either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.

Revised/Reviewed: March 22, 2011 By: Dana Wm. Somesla, Chemist