MATERIAL SAFETY DATA SHEET

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200 Standard must be consulted for specific requirements. U.S. Department of Labor Occupational Safety and Health Administration (Non-Mandatory Form) Form Approved OMB No.1218-0072

IDENTITY: (As Used on Label and List): Commercial Chlor, Azone & Super Azone, Ucide-110

Liquid Chlorine - Sodium Hypochlorite Solution

SECTION I - Manufacturer's Name: Commercial Supply Commercial Pool & Spa Supplies, Inc. Information Telephone: (651) 766-6666 1167 East Highway 36 Maplewood, MN 55109

Date Prepared: 4/2/96

Emergency Telephone: INFOTRAC 1-800-535-5053

SECTION II - Hazardous Ingredients/Identity Information

HAZARDOUS COMPONENTS: (Specific Chemical Identity, Common Name(s).Sodium Hypochlorite SolutionCAS 7681-52-9 UN 1823 7.5-12.5%Sodium HydroxideCAS 1310-73-2 UN 1823 0.8%

SECTION III - Physical/Chemical Characteristics

Boiling Point: 760 mm Hg Specific Gravity (H2O=1): 9.2%=1.1, 12.5%=1.2 Vapor Pressure (mm Hg.): Variable-water plus products of decomposition. Melting Point: N/A Vapor Density (Air=1): N/A Evaporation Rate (Butyl Acetate=1): N/A Solubility in Water: Complete. Appearance and Odor: Yellow-green liquid with disagreeable odor.

SECTION IV - Fire and Explosion Hazard Data

Flash Point (Method Used): N/A Flammable Limits: N/A Extinguishing Media: Flood with water or Carbon Dioxide (CO2) Special Fire Fighting Procedures: Use National Institute of Occupational Safety & Health (NIOSH) certified gas mask with canister for chlorine or use self-contained breathing apparatus. Unusual Fire and Explosion Hazards: Material is strong oxidizer; contact with combustibles may intiate or promote combustion. Acid and heat accelerate decomposition. Decomposition products may include chlorine.

SECTION V - Reactivity Data

Stability: Stable Unstable

Conditions to Avoid: Light, heat, fire, low pH, metallic impurities; naturally decomposes with age. Material is generally stable. Incompatibility (Materials to Avoid): Acid, ammonia, amines, cyanides, chlorinate isocyanurates, combustibles, detergents, reducing agents, oxidizable materials, corrosive to most metals. Hazardous Decomposition or Byproducts: Contact with acid releases chlorine gas; natural decomposition product is oxygen. Thermal decomposition, or burning may produce HC1.

Hazardous Polymerization: May Occur Will Not Occur X Conditions to Avoid:N/A

Page 2

SECTION VI - Health Hazard Data

Route(s) of Entry: **Inhalation:** Fumes from **Spills** are very irritating to mucous

membranes. Very little hazard from properly stored solution.

Skin? Severe irritant, reddening of skin, skin damage.

Ingestion? Causes irritation of membranes of the mouth, throat and stomach pain and possible ulceration. LD50 (oral, rat) for 12.5% NaOC1 is above 5g/kg. body weight. Health Hazards (Acute and Chronic)

Carcinogenicity? NTP? IARC Monographs?

OSHA Regulated?

Signs and Symptoms of Exposure:

Medical Conditions Generally Aggravated by Exposure: N/A

Emergency and First Aid Procedures:

Eyes: Immediately flush with water for at least 15 minutes. Get medical attention.

Skin: Remove soaked clothes; wash with soap and water for at least 5 minutes.

Inhalation: Remove to fresh air. Call physician, if exposure is severe.

Ingestion: If conscious, 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.

SECTION VII - Precautions of Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled:

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

Waste Disposal Method: Contain in plastic tank or similar container; use sulfur dioxide gas, sodium sulfite, sodium bisulfite or ferrous salts. Discharge of treated effluents into lakes, streams or public waters requires a valid discharge permit. Contact Federal, State, County, and local environmental regulators for guidance. Precautions to Be Taken in Handling and Storing: Proper handling of sodium hypochlorite solution requires safety requirements (as described above) and as stated on the labels. Full protection as described above should be provided when handling bulk shipments of concentrated, industrial

sodium hypochlorite solutions. Other Precautions: Strong oxidizing agent. Mix only with water according to label directions. Store upright in a cool, dry area away from direct sunlight and excessive heat. Do not store near other incompatible swimming pool products such as chlorinated isocyanurates or muriatic acid. Rinse container with water.

The information and recommendations in this Material Safety Data Sheet are based upon data believed to be correct and does not relate to its use in combination with any other material or process. This Material Safety Data Sheet complies with the OSHA Hazard Communication Standard (29CFR1910.1200). Therefore, since use conditions vary, we assume no liability for failure to follow product use directions and safety precautions. We can give no warranty or guarantee of any kind.