Material Safety Data Sheet U.S. Department of Labor May be used to comply with Occupation Safety and Health Administration OSHA's Hazard Communication Standard (Non-Mandatory Form) Form Approved 29 CFR 1910.1200. Standard must be consulted for specific requirements OMB No. 1218-0072 IDENTITY Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that. **BEA-DEW** (200040) Section I Manufactured For: **Emergency Telephone Number** Beaver Research Company 1-800-255-3924 (Chem-Tel) Address (Number, Street, City, State, and ZIP Code) Telephone Number For Information 3700 E. Kilgore Road, Portage, MI 49002 269-382-0133 NFPA/HMIS RATINGS: Health: 2 **Date Prepared** 0-Minimal 3-Serious Flammability: 0 12/07/99 1-Slight 4-Extreme Reactivity: 0 Signature of Preparer (optional) 2-Moderate Section II - Hazardous Ingredients/Identity Information Hazardous Components (Specific Chemical TLV Other Limits % Identity; Common Name(s)) CAS No. (units) Recommended (optional) 25% Aqueous Sodium Hydroxide 1310-73-2 2 MG/CU M < 9.00 Sodium Hypochlorite 12% 7681-52-9 n/e <13.00 Section III - Physical/Chemical Characteristics **Boiling Point** 215°F Specific Gravity (H₂O = 1) 1.12 +/- .02 Vapor Pressure (mmHq) Unknown % Volatiles 91% Vapor Density (AIR = 1) Unknown **Evaporation Rate** 1 (Butyl Acetate = 1) Solubility in Water 12.0 - 13.0 рΗ Total VOC Complete Appearance and Odor Clear, yellow liquid with bleach odor. Section IV - Fire and Explosion Hazard Data Flash Point (Method Used) Flammable Limits LEL UEL No flash at boil (C.C. Method) Non-flammable N/A N/A **Extinguishing Media** N/A Special Fire Fighting Procedures Use water to cool containers exposed to fire. On small fire, use dry chemical, CO₂ or water spray. On large fires, use water in flooding quantities as fog. Unusual Fire and Explosion Hazards In case of fire, hazardous concentrations of chlorine may be formed. Wear full protective clothing. Section V - Reactivity Data Stability Unstable Conditions to Temperature extremes. Avoid Stable X Incompatibility (Materials to Avoid) When handling this product, avoid contact with aluminum, tin, zinc, and alloys containing these metals. Do not mix with strong acids wihout dilution and agitation to slow reaction. Avoid contact with leather, wool, acids, organic halogen compounds and organic nitro compounds, iron, copper, ammonium compounds and other oxidizers. Hazardous Decomposition or Byproducts Chlorine gas. Hazardous May Occur Conditions to N/A Avoid Will Not Occur Polymerization X

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Section VI - Health Hazard Data Route(s) of Entry: Inhalation? Skin? Ingestion? Yes Yes Yes

Health Hazards (Acute and Chronic)

Eyes: Exposure may result in severe damage or blindness. Exposure to surrounding tissues may cause severe burns. Symptoms may include burning, redness, tearing and blurry vision.

Skin: Exposure causes immediate skin irritation. Contact may produce severe skin burns and destruction of tissue. **Inhalation**: Breathing dust, mist or spray may cause damage to the upper respiratory tract and lung tissue which could produce chemical pneumonia, depending on severity of exposure.

Ingestion: Causes burns to mucous membranes of the mouth, throat, esophagus and stomach.

Carcinogenicity: NTP? IARC Monographs? OSHA Regulated?
No No No

Signs and Symptoms of Exposure

This product is an irritant to all body tissues by all routes of exposure. The effect of local dermal exposure may consist of multiple areas of superficial destruction of the skin or of primary irritant dermatitis. Similarly, inhalation of dust, spray, or mist may result in varying degrees of irritation or damage to the respiratory tract tissues and an increased susceptibility to respiratory illness.

Medical Conditions Generally Aggravated by Exposure

Adrenal glands and possible depression of the immune system.

Emergency and First Aid Procedure

Eyes: Flush eyes with low pressure, lukewarm water for at least 15 minutes while lifting eyelids occasionally. See a physician.

Skin: Flush exposed areas with water for 15 minutes. If irritation persists, consult a physician. Launder contaminated clothing before reuse.

Inhalation: Remove victim to fresh air and administer oxygen if breathing is difficult. Get medical attention. **Ingestion**: Do not induce vomiting. Give one or two glasses of water or milk and call a physician or local Poison Control Center immediately. Never give anything by mouth to an unconscious person.

Section VII - Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled

All leaks sould be stopped. Spills should be contained and cleaned up immediately. Neutralize remaining traces of material with any dilute inorganic acid such as sulfuric, nitric or phosphoric acid. The spill area should then be flushed with water followed by liberal covering of sodium bicarbonate. All clean-up material should be removed and placed in approved containers, labeled and stored in a safe place to await proper treatment or disposal. Persons performing clean up work should wear adequate personal protective equipment and clothing.

Waste Disposal Method

Dispose of in accordance with all applicable Federal, State and Local regulations.

Precautions to be Taken in Handling and Storage

Do not get into eyes, on skin, or on clothing. Avoid breathing dust, mists or spray. Do not take internally. Use with adequate ventilation and wear respiratory protection when exposure to dust, mist or spray is possible. When handling, wear chemical splash goggles, face shield, rubber gloves and protective clothing. Wash thoroughly after handling or contact -- exposure can cause burns which are not immediately painful or visible. Keep container closed when not in use. Product is corrosive to tin, aluminum, zinc and alloys containing these metals, and will react violently with these metals in powder form. Keep in a cool, dry place. Keep away from oxidizers, acids, nitrogen containing materials such as quaternary ammonium salts. Keep from freezing.

Section VIII - Control Measures

Respiratory Protection (Specify Type)

Respiratory protection is not required under normal use. Use NIOSH/MSHA approved respirators where dust, mist, or spray may be generated.

 Ventilation
 Local Exhaust
 Sufficient
 Special
 N/A

 Mechanical(General)
 Sufficient
 Other
 N/A

 Protective Gloves
 Eye Protection

Wear chemical resistant gloves such as natural or butyl rubber. Gloves may be decontaminated by washing with mild soap and water.

Wear chemical safety goggles plus full face shield to protect against splashing.

Other Protective Clothing or Equipment

Impervious clothing and chemically resistant safety shoes should be worn to minimize contact.