

MATERIAL SAFETY DATA SHEET

FOR CHEMICAL EMERGENCY Spill, Leak, Fire, Exposure or Accident CALL CHEMTREC DAY OR NIGHT 800-424-9300

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: LIQUID STRUCTURE
24 hr. Emergency #: 800-424-9300
US DOT Hazardous Materials Registration No.: 062504-001-008MO
Commercial & Government Entity (CAGE) Code: 0YCK6

CHEMICAL NAMES & SYNONYMS: N/A

FORMULA: Proprietary

CHEMICAL FAMILY: Blended alkaline cleaner/detergent

SUPPLIER'S NAME: Fabriclean Supply of Kansas, LC

SUPPLIER'S ADDRESS: 14400 W. 97th Terrace

SUPPLIER'S CITY, STATE, ZIP: Lenexa, KS 66215

SUPPLIER'S TELEPHONE: (800) 832-0096

SECTION 2 - INGREDIENTS

<u>INGREDIENTS</u>	<u>PERCENT</u>	<u>ADOPTED VALUES</u>
Sodium hydroxide a.k.a. caustic soda CAS # 1310-73-2		ACGIH TLVs: STEL/CEIL 2 mg/m3. OSHA PELs: STEL/CEIL 2 mg/m3. (Vacated) NIOSH RELs: STEL/CEIL 2 mg/m3 15-min TWA ceiling.

(**Note:** The exact composition of this product, with respect to the percentages of its' reported ingredients and the presence of its' non-regulated ingredients [not reported], is proprietary information and is being withheld. In the event of a medical emergency, total disclosure will be made to the proper authorities.)

SECTION 3 - HEALTH HAZARDS IDENTIFICATION

Primary Routes of Entry: Eye/skin contact. Inhalation. Ingestion.

EFFECTS OF OVEREXPOSURE: **EYES:** Danger! This product contains sodium hydroxide, which is destructive to eye tissue on contact. Will cause severe burns that can result in damage to the eyes and even blindness. **SKIN:** Product can be destructive to tissues contacted, producing severe burns and temporary loss of air. Chronic overexposure may consist of multiple areas of superficial destruction of the skin or dermatitis. **INHALATION:** Airborne concentrations of mist or spray of product may cause damage to the upper respiratory tract and even to the lung tissue proper which could produce chemical pneumonia, depending upon severity of exposure. Chronic overexposure to spray or mist may result in irritation or tissue damage. **INGESTION:** Can cause severe burns and complete tissue perforation of mucous membranes of the mouth, throat, esophagus, and stomach if swallowed -- can prove fatal.

OSHA, IARC, OR NTP CARCINOGEN INFORMATION: None of the ingredients in this product is classified as being carcinogenic by OSHA, ACGIH, IARC or NTP.

SECTION 4 - FIRST AID MEASURES

EYES: Object is to flush material out of eyes immediately, then seek medical attention. Immediately flush with plenty of water for at least 15 minutes while holding eyelids open to ensure flushing of the entire eye surface. Get medical attention.

SKIN: Immediately wash contaminated areas with plenty of water for at least 15 minutes. Remove contaminated clothing and footwear and wash clothing before reuse. Discard footwear, which cannot be decontaminated. Seek medical attention if symptoms develop or persist.

INHALATION: Remove to fresh air; if breathing is difficult, have trained personnel administer oxygen. If respiration stops, give mouth-to-mouth resuscitation. Get immediate medical attention. (**Note:** Coughing, sneezing or other symptoms of upper respiratory irritation may serve as a warning of exposure to high airborne concentrations.)

INGESTION: DO NOT INDUCE VOMITING! Rinse mouth with water; give large quantities of water or milk to drink. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Give more liquids. Do not give anything by mouth to an unconscious or drowsy person. Get immediate medical attention. (Because rapid absorption may occur through lungs if aspirated and cause systemic effects, the decision of whether to induce vomiting or not should be made by a physician.)

SUPPLEMENTAL HEALTH INFORMATION: Pre-existing eye, skin and respiratory disorders may be aggravated by exposure.

SECTION 5 - FIRE & EXPLOSION HAZARDS / FIRE FIGHTING MEASURES

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Flash Point: This product is not flammable.

Flammable Limits: N/A

Extinguishing Media: Use carbon dioxide, "alcohol" foam or dry chemicals where product is used or stored.

Special Fire Fighting Procedures: Pressure-demand self-contained respiratory protection and protective clothing should be worn by firefighters. Thoroughly decontaminate equipment after use. Flood with water to cool containers, using care not to splatter or splash the material.

Unusual Fire and Explosion Hazards: Highly flammable hydrogen is formed by reaction of contact product with aluminum, tin, zinc, and alloys which contain these metals. Product may ignite combustible materials or organic matter on contact.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Steps to be taken if material is released or spilled: Cleanup workers must use protective clothing and equipment to prevent body contact. Running water should be available for emergency use. Preferred cleanup procedure: Dam up spill over with sand or inert porous material, transfer to caustic-resistant containers (labeled "Corrosive"). Avoid flushing chemical into public sewer or water systems. Flush clean-up area with water. Dilute solutions of acid, preferably acetic acid, may be used to neutralize final traces of alkalinity (observe appropriate safety precautions for handling acid solutions). Small spills may be neutralized with dilute acidic solution before flushing away. For large spills, pick up spill with vacuum equipment (alkaline resistant) for disposal, or flush to holding area with water, prior to neutralization. Notify local health and pollution control officials if flushed spillage unavoidably enters public sewers or other water systems.

Additional Information: Surface subject to spills with this product will become slippery when wet. Exercise extreme caution when cleaning up spills.

SECTION 7 - HANDLING AND STORAGE

Precautions to be taken in handling and storing: Keep container CLOSED when not in use. Avoid all contact with strong acids to prevent violent, explosive reactions. Do not allow water to get into container (may cause violent reaction). Emptied container retains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory Protection: For exposures above PEL/TLV and up to 50 mg/m³ use either any air-purifying respirator with mist filter, or any supplied air respirator operating in a continuous flow mode.

Ventilation Required: Provide ventilation adequate to maintain airborne concentrations below OSHA limits of 2 mg/m³. Local exhaust ventilation preferred where dilutions or reactions cause misting. Air concentration of carbon monoxide formed by reaction should not exceed 50 ppm for a 8 hr TWA. Ventilation equipment should be corrosion resistant, and if hydrogen may be generated explosion proof.

Protective Clothing: Eyes: Chemical splash goggles and face shield should be worn whenever exposure possible. Have eye baths immediately available where eye contact can occur. **Skin:** Gloves coated with rubber, PVC, or other plastic required, also hard hats, safety shoes, and rubber boots, along with rubber apron when handling product. Provide a safety shower at any location where skin contact can occur. Sleeves should be worn over gloves and trouser cuffs over rubber boots to avoid skin contact.

Additional Protective Measures: Safety shower, eye bath and washing facilities should be available and easily accessible. Neutralization supplies (3% acetic acid preferably) and abundant running water should be close at hand in working and storage area.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Essentially clear, colorless **State:** Liquid

Odor: Slight

Solubility in Water: Complete

pH: 13.0 - 13.5 typical

Specific Gravity: 1.394

SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable

Incompatibility: Strong acids, leather and wool, also aluminum, zinc, tin and alloys containing these metals, nitrocarbons, halocarbons, aldehydes, etc. (trichloroethylene will react to form spontaneously flammable dichloroacetylene.)

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Hazardous Decomposition: CO, CO2, smoke, soot and oxides of nitrogen can be produced. Hydrogen Gas.

Hazardous Polymerization: Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

Toxicological Information: Acute Oral: LD(LO) - 500 mg/kg

Chemical Fate Information: Ingestion of large amounts may prove fatal.

SECTION 12 - ECOLOGICAL INFORMATION

UNK

SECTION 13 - DISPOSAL CONSIDERATIONS

Appropriate disposal will depend on the nature of each waste material and should be performed by competent and properly permitted contractors. Ensure that all responsible Federal, State, and local agencies received proper notification of spill and disposal of waste, if required.

If not diluted and neutralized, this product can become a hazardous waste as designated by EPA under authority of the Resource Conservation and Recovery Act. This waste would have RCRA hazardous waste number D002 (corrosive) as designated in 40 CFR 261.22.

SECTION 14 - TRANSPORT INFORMATION

Proper Shipping Name: Compounds, cleaning liquid (containing sodium hydroxide)

Hazard Class: 8

UN#: NA1760

Packing Group: II

Sticker Required: Corrosive

Emergency Response Guidesheet: 154

SECTION 15 - REGULATORY INFORMATION

(Notice: The information herein is presented in good faith and believed to be accurate as of the effective date shown below. However, no warranty, expressed or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations.)

(A simple explanation of each act [legislation] is included in this section. Ingredients listed in these sections means they are governed by that particular act.)

RCRA - RESOURCE CONSERVATION AND RECOVERY ACT (HAZARDOUS WASTE): The act that mandated the development of hazardous waste regulations. These regulations can be found in 40 CFR 260-281.
Sodium hydroxide / concentrated as waste.

REPORTABLE QUANTITIES - CERCLA (ACCIDENTAL RELEASE): The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) identifies a list of substances that have an adverse effect if released to the environment. The Act designates the reportable quantity (RQ) for each of these substances, and the notification requirements for releases or spills. When a specified amount of a chemical is released or spilled, the National Response Center must be notified. This specified amount is the "reportable quantity." The reportable quantity for each chemical is based on the severity of environmental hazard it presents.

Sodium hydroxide - 1,000 lbs.

THRESHOLD PLANNING QUANTITIES (SARA - COMMUNITY RIGHT TO KNOW) EXTREMELY HAZARDOUS SUBSTANCE LIST: The Extremely Hazardous Substance (EHS) list and planning quantities trigger certain reporting requirements to emergency planning agencies. If your facility has a listed hazardous substance in amounts equal to or greater than the quantities shown on the index, the regulations of 40 CFR 355 and 370 apply to you.

No ingredients listed.

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SARA TITLE III, SECTION 313: EPA has developed a list of over 320 regulated chemicals and 22 chemical categories. An entry in this section, indicates that a given chemical appears on this list. The entry will consist of a date, which identifies the effective date for reporting; and a "de minimis" amount. This amount, 1% or 0.1%, indicates the minimum amount of a chemical that must be present in a mixture to trigger reporting.

No ingredient listed.

RISK MANAGEMENT PROGRAM - EPA: On January 31, 1994, a new EPA rule was finalized. It was required under section 112(r) of the Clean Air Act. It is aimed at preventing accidental chemical releases. This first rule presented a list, composed of three categories: 77 toxic substances, 63 flammable substances, and explosive substances with a mass explosion hazard as listed by DOT. The complete regulation can be found in 40 CFR Part 68 - Chemical Accident Prevention Provisions.

No ingredients listed.

WHMIS - CANADA: The Workplace Hazardous Materials Information System (WHMIS) is Canada's version of Hazard Communication. Its provisions closely parallel the US. Regulations.

Sodium hydroxide - 1%

DOT: The Department of Transportation (DOT) regulates those substances that present a potential hazard during transportation. There may be labeling, special packaging, and/or placarding required.

Sodium hydroxide.

NFPA - NATIONAL FIRE PROTECTION ASSOCIATION: The National Fire Protection Association (NFPA) is a nonprofit, educational organization. The goal of NFPA is to promote the science of fire protection and prevention. With this aim, NFPA has developed information on the hazardous properties of many chemicals, which enables the user to come up with safe procedures during the chemicals' use, storage, and transportation. There are three categories of hazards: Health (H), Flammability (F), and Reactivity (R). Within each category, there are numerical ratings from 0 - 4, with 0 indicating no hazard, 4 indicating severe hazard.

Sodium hydroxide - Health 3 / Fire 0 / Reactivity 2

Process Safety Management - OSHA: OSHA established a regulation (1910.119) to monitor and control safety at certain types of industrial facilities. Compliance is triggered by specified quantities of specific chemicals.

No ingredient listed.

Proposition 65 - California: Proposition 65 refers to an initiative passed by the California voters in the November 1986 elections. It is the Safe Drinking Water and Toxic Enforcement Act of 1986. One of the components is the listing of chemicals known to cause cancer or reproductive toxicity. Twelve months after a chemical is listed, a person in the course of doing business must warn another person who may consume, come into contact with, or otherwise be exposed to that chemical.

No ingredient listed.

The New Clean Air Act - Hazardous Air Pollutants: This rule regulates the emissions of 112 of the organic chemicals identified in the Cats list of 189 hazardous air pollutants.

No ingredient listed.

SECTION 16 - OTHER INFORMATION

This Material Safety Data Sheet has been prepared in accordance with OSHA 1910.1200(g) Hazard Communications Standard, Material Safety Data Sheets and American National Standards Institute Z400.1.

AS A GENERAL RULE, PREVENT AND PROTECT THIS PRODUCT FROM UNAUTHORIZED USE

FOR INDUSTRIAL USE ONLY !!!!!

END OF REPORT

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(636) 296-3131, 296-3888

DATE ISSUED: 05/29/02
DATE REVISED: 07/01/04

< = LESS THAN
> = MORE THAN
UNK = UNKNOWN

N/A = NOT APPLICABLE
N/D = NOT DETERMINED
N/E = NOT ESTABLISHED

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In accord with the philosophy established by the Occupational Safety and Health Administration's Hazard Communication Final Rule, 1985, this Material Safety Data Sheet has been designed to emphasize the hazardous portions (ingredient[s]) utilized in the total formulation. As a result, the information herein stresses the most hazardous component(s) only. By this approach, we feel better knowledge and awareness should substantially contribute to reduce exposure and injury to workers involved with the use of this product. The information supplied in this document is presented for exactly this purpose. As required by law, this data should be thoroughly read and made available to anyone who may be responsible for handling this material. All data provided relates to the concentrated product as shipped. Actual usage rates and further dilution will, in most cases, greatly reduce, if not eliminate, the potential for worker injury. Any and all chemical products should be handled with extreme care and only by authorized and informed personnel. Each aspect of your operation should be examined to determine if, or where, additional precautions may be necessary. All health and safety information contained in this MSDS should be provided to your employees or customers. It is your responsibility to use this information to develop appropriate work practice guidelines and employee instructional programs for your operation.

The information and recommendations provided in this Material Safety Data Sheet have been obtained from data we believe to be reliable. We provide no warranties, expressed or implied, or accept no responsibility for loss associated with the use or handling of this product. This information is offered for your review and consideration. Efforts should be extended to determine the applicability of this product for your specific intended use. We know of no medical condition, other than those noted in this Material Safety Data Sheet, which are generally recognized as being aggravated by exposure to this product.

REASON FOR REVISION: Section 1 - Haz. Mat. Reg. number