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: ORTHOLIN ALKALI BUILDER
MANUFACTURERS NAME: Custom Compounders, Inc.
d/b/a Stewart Chemical Products Co.
#1 Tenbrook Industrial Court - Arnold, MO 63010
Telephone: (636) 296-3131 or 296-3888
Fax No.: (636) 296-4242
US D.O.T. Hazardous Materials Registration No.: 062504-001-008MO
Commercial & Government Entity (CAGE) Code: 0YCK6

CHEMICAL NAMES & SYNONYMS: N/A
HMIS RATING: Health 3 / Fire 0 / Reactivity 1
FORMULA: Proprietary
CHEMICAL FAMILY: Blended alkaline compound
SUPPLIER'S ADDRESS: 14400 W. 97TH TERRACE
LENEXA, KS 66215
SUPPLIER'S TELEPHONE: (800) 832-0096

(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 2 - INGREDIENTS

INGREDIENTS PERCENT ADOPTED VALUES
Sodium hydroxide a.k.a. caustic soda CAS # 1310-73-2 ACGIH TLVs: Ceiling 2 mg/m3.
OSHA PELs: Ceiling 2 mg/m3. (Ceiling vacated by 1993 court ruling)
NIOSH RELs: Ceiling 2 mg/m3.

Sodium metaasilicate, silicic acid disodium salt CAS # 6834-92-0 N/E - treat as sodium hydroxide.
See Regulatory Information Section 13.

Silica-Amorphous Precipitated silica CAS # 112926-00-8 ACGIH TLVs: TWA - 10 mg/m3.
OSHA PELs: 20 mppcf or 80 mg/m3
% SiO2

SECTION 3 - HEALTH HAZARDS IDENTIFICATION

Threshold Limit Value: As indicated in Section 2 (above).

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

EFFECTS OF OVEREXPOSURE: (Acute) Corrosive to all body tissues with which it comes in contact. 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. These effects occur only when the TLV is exceeded.

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

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.)
**MATERIAL SAFETY DATA SHEET**

**SECTION 5 - FIRE & EXPLOSION HAZARDS / FIRE FIGHTING MEASURES**

**Flash Point:** Non-flammable.

**Flammable Limits:** N/A

**Extinguishing Media:** This product is non-combustible. Water spray, dry chemical, CO2, or foam may be used in areas where this product is stored.

**Special Fire Fighting Procedures:** Pressure-demand, self-contained breathing apparatus should be provided for fire fighters in buildings or confined areas where this product is stored.

**Unusual Fire and Explosion Hazards:** Protective clothing for skin and eye protection should be worn to protect against highly alkaline chemicals.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

**Steps to be taken if material is released or spilled:** If the material is spilled, steps should be taken to contain liquids and prevent discharges to streams or sewer systems. Spills or releases should be reported, if required to the appropriate local, state, and federal regulatory agencies. Observe precautionary measures. Leaks should be stopped. Spills, after containment, should be shoveled up to be removed by vacuum truck (if liquid) to a chemical waste area. Neutralize residue with dilute acid, flush spill area with water followed by liberal covering of sodium bicarbonate. Dispose of wash water and spill by-products according to federal, state and local regulations.

**SECTION 7 - HANDLING AND STORAGE**

**Precautions to be taken in handling and storing:** Do not get into eyes, on skin, on clothing. Avoid breathing dust, mists, or spray. Do not take internally. Use with adequate ventilation and employ 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.

**SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION**

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

**Ventilation Required:** Special ventilation is not required under normal use. Use local exhaust ventilation where dust, mist, or spray may be generated.

**Protective Clothing:** Eyes: Wear chemical safety goggles plus full face shield to protect against splashing. Gloves: Chemical resistant gloves should be worn. Gloves may be decontaminated by washing with mild soap and water. Natural and butyl rubber have been suggested. Other clothing and equipment: Impervious protective clothing and chemical resistant safety shoes should be worn to minimize contact. Wash contaminated clothing with soap and water and dry before reuse. Showers and eyewash facilities should be accessible.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance:** White, granular powder

**State:** Solid

**Odor:** No distinct odor.

**Solubility in water:** Complete

**pH:** (1 % solutions): 13.0 - 13.5 typical

**SECTION 10 - STABILITY AND REACTIVITY DATA**

**Stability:** Stable

**Incompatibility:** This product is alkaline - avoid contact with acidic materials. Addition of water to product creates heat.

**Hazardous Decomposition:** UNK

**Hazardous Polymerization:** Will not occur.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

**Toxicological Information:** UNK

**Chemical Fate Information:** UNK
SARA TITLE III, SECTION 313: EPA

No ingredients 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.

Hazardous Substance (EHS) list and planning quantities trigger certain reporting requirement to emergency planning agencies. If your facility has a listed substance, the regulations of 40 CFR 355 and 370 apply to you.

- Sodium metasilicate at 1% levels.
- Sodium hydroxide at 1% levels.

Closely parallel the US. Regulations.

WHMIS

No ingredients listed.

Chemical Accident Prevention Provisions.

Packing Group:

UN#: UN1759

Packing Group: II

Sticker Required: Corrosive (8) Emergency Response Guide Sheet: 154

SECTION 14 - TRANSPORT INFORMATION

Proper Shipping Name: Corrosive solids, NOS (contains sodium hydroxide, sodium metasilicate anhydrous)

Hazard Class: 8

UN#: UN1759

SECTION 13 - DISPOSAL CONSIDERATIONS

Clean up action should be carefully planned and executed. Shipment, storage, and/or disposal of waste materials are regulated and action to handle spilled or released materials must meet the applicable rules. If any questions exist, the appropriate agencies should be contacted to assure proper action being taken.

SECTION 12 - ECOLOGICAL INFORMATION

UNK

SECTION 11 - METADATA

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.

No ingredients listed.

- 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 requirement 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.

- 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 ingredients 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.


Sodium hydroxide at 1% levels.
Sodium metasilicate at 1% levels.
**DOT:** The Department of Transport (DOT) regulates those substances that present a potential hazard during transportation. There may be labeling, special packaging, and/or placarding required.

Sodium hydroxide regulated.

**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 1

**HAZARD COMMUNICATION:** OSHA’s Hazard Communication Standard initially went into effect November 1985/May 1986. It is OSHA’s most comprehensive worker protection regulation. It provides for information and training for workers encountering chemical exposures in the workplace. The standard requires the use of labels and Material Safety Data Sheets for all regulated chemicals.

- **National Toxicology Program (NTP):** A list of carcinogens. Product/ingredients not listed as a carcinogen.
- **IARC - International Agency For Research On Cancer:** Another carcinogen list. Product/ingredients not listed as a carcinogen.
- **Subpart Z - OSHA:** (Found at 1910.1000-.1101) If a chemical is on this list, it means there are specific training requirements on the handling, etc. Product/ingredients not listed as a carcinogen.
- **Threshold Limit Values: ACGIH:** Threshold limit values (TLVs) which refer to airborne concentrations of substances and represent conditions under which nearly all workers must be repeatedly exposed day after day without adverse effect.

Sodium hydroxide is listed.

**SECTION 16 - OTHER INFORMATION**

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

**FOR INDUSTRIAL USE ONLY !!!!!!!**

**END OF REPORT**

**NAME:** Robert C. Jaudon  
(636) 296-3131, 296-3888  
**DATE ISSUED:** 09/05/96  
**DATE REVISED:** 07/01/04

< = LESS THAN  
> = MORE THAN  
UNK = UNKNOWN  
N/A = NOT APPLICABLE  
N/D = NOT DETERMINED  
N/E = NOT ESTABLISHED

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