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: REVELATION DETERGENT
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
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 detergent
SUPPLIER'S NAME: Fabricliclean 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

<table>
<thead>
<tr>
<th>INGREDIENTS</th>
<th>PERCENT</th>
<th>ADOPTED VALUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium phosphate, tribasic CAS # 7758-29-4</td>
<td>N/E - Treat as “Nuisance Particulates”</td>
<td>Particulates not otherwise classified. ACGIH TLVs: TWA 10 mg/m³. OSHA PELs: TWA 15 mg/m³ total dust. 5 mg/m³ - respirable fraction. See Section 15 for Regulatory Information.</td>
</tr>
<tr>
<td>Sodium Carbonate CAS # 497-19-8</td>
<td>N/E - Treat as &quot;Nuisance Particulates&quot;</td>
<td>Particulates not otherwise classified. ACGIH TLVs: TWA 10 mg/m³. OSHA PELs: TWA 15 mg/m³ total dust. 5 mg/m³ - respirable fraction. See Section 15 for Regulatory Information.</td>
</tr>
<tr>
<td>Sodium Hydroxide CAS # 1310-73-2</td>
<td></td>
<td>ACGIH TLVs: STEL/CEIL 2 mg/m³. OSHA PELs: TWA 2 mg/m³. NIOSH RELs: STEL/CEIL 2 mg/m³ - 15 minute TWA ceiling. DFG MAKs: TWA 2 mg/m³. See Section 15 for Regulatory Information.</td>
</tr>
<tr>
<td>Sodium Metasilicate CAS # 6834-92-0</td>
<td>N/E - Treat as sodium hydroxide. (See above entry.)</td>
<td>See Section 15 for Regulatory Information.</td>
</tr>
</tbody>
</table>

(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: Warning this product contains Sodium hydroxide and Sodium metasilicate! These components are corrosive to eyes, skin, mucous membranes of the respiratory tract, mouth, throat, esophagus and stomach. Will cause eye damage if not treated immediately. These effects only occur when the TLVs are exceeded. Chronic: No known chronic effects.

OSHA, IARC, OR NTP CARCINOGEN INFORMATION: This product may contain trace amounts of ethanol, ethylene oxide, and 1,4-dioxane. The trace amounts of these hazardous components individually and/or collectively are not expected to result in either acute or long-term hazards when this product is handled according to instructions. You should know though, ethanol is classified as a depressant drug. Ethylene oxide and 1,4-dioxane are classified as carcinogens and reproductive hazards.
FIRST AID PROCEDURES:

**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. The OSHA and ACGIH Nuisance Dust Limits are stated only to indicate the least stringent airborne dust exposure levels applicable to nuisance dusts. This product may cause skin and eye irritation at exposure concentrations below these limits.

SECTION 5 - FIRE & EXPLOSION HAZARDS / FIRE FIGHTING MEASURES

**Flash Point:** Non-flammable  
**Flammable Limits:** Non-flammable

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

**Special Fire Fighting Procedures:** Protective clothing for skin and eye protection should be worn to protect against highly alkaline chemicals. Pressure-demand, self-contained breathing apparatus should be provided fire fighters where this product is stored.

**Unusual Fire and Explosion Hazards:** Product can react with water, acids and other substances.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

**Steps to be taken if material is released or spilled:** Spills should be contained and scooped up and placed in approved containers for disposal. Neutralize residue with dilute acid, flush spill area with water followed by liberal covering of sodium bicarbonate. All clean-up material should be removed and await proper treatment or disposal. Spills on areas other than pavement, e.g., dirt or sand, may be handled by removing the affected soils and placing in approved containers. Persons performing clean-up work should wear adequate personal protective equipment and clothing. Spills or releases should be reported if required, to the appropriate agencies. Dispose of wash water and spill by-products according to all 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 or 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. Do not store in aluminum containers as flammable hydrogen gas can be generated. Do not use aluminum fittings or transfer lines. Avoid all contact with acids. Product is corrosive to tin, aluminum, zinc and alloys containing these metals. Hazardous carbon monoxide gas can form upon contact with food and beverage products in enclosed spaces and cause death.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

**Respiratory Protection:** Use NIOSH/MSHA approved respirator following manufacturers recommendation where dust, mist or spray is possible.

**Ventilation Required:** Use adequate local exhaust ventilation where dust, spray or mist may be generated.

**Protective Clothing:** Eyes: Wear chemical safety goggles with full-face shield when working with this product. Do not wear contact lenses when working with chemicals. **Skin:** Wear rubber gloves. Gloves may be cleaned by washing with mild soap and
water. Standard work clothes should be worn with long sleeves, and pant legs over rubber boots. Wash soiled clothing in soap and water and dry before re-use.

Additional Protective Measures: Safety shower, eye bath and washing facilities should be available and easily accessible.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** White, granular, crystalline

**State:** Solid

**Odor:** No distinguishable odor.

**pH:** 12.5 - 12.7 typical

SECTION 10 - STABILITY AND REACTIVITY

**Stability:** Stable

**Incompatibility:** Acids, leather, wool, organic halogen compounds, aluminum, tin, lead, and zinc.

**Hazardous Decomposition:** None known.

**Hazardous Polymerization:** Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

**Toxicological Information:** Sodium metasilicate: Acute Oral LD(50) (rat) 800 mg/kg. Skin Irritation (rabbit) Severe 250 mg/24 hr (product may be considered highly alkaline).

Sodium hydroxide - Acute Oral LD(50) (rat) 140 - 340 mg/kg. Skin Irritation (rabbit) 1350 mg/kg.

Human Dermal Exposure (sodium hydroxide): Regardless of concentration, the severity of damage and extent of its irreversibility increases with length of contact time. Prolonged contact with even dilute sodium hydroxide solution can cause a high degree of tissue destruction. The latent period, following skin contact during which no sensation or irritation occurs, varies from several hours for 1.04 - 4% solutions to 3 minutes with 25 - 50 solution.

Ethanol - Acute Oral LD(50) (rat) 13.7g/kg. Skin irritation (rabbit) LD(50) > 2.0g/kg.

Sodium phosphate, tribasic - Eyes - mild irritant (rabbit) FMC Study 186-917, dated 1986. Skin - non-irritating FMC Study 188-1047, dated 1988. Inhalation - no significant hazard expected. LD(50) > 0.39 mg/L (rat, 4 hour). FMC Study 188-1011. Ingestion - no significant hazard. LD(50) (rat) 6.5 g/kg. RTECS, 1980.

Sodium carbonate - Eyes - severe irritation Toxicology 23.281-291, 1982. Ingestion - LD(50) (rat) 2.8 gm/kg.

**Chemical Fate Information:** Sodium hydroxide / sodium carbonate - ingestion of large amounts may cause vomiting, diarrhea, circulatory collapse and death.

SECTION 12 - ECOLOGICAL INFORMATION

Sodium phosphate, tribasic: Inorganic phosphates in contact with the soil, sub-surface or surface waters may be taken up by plants and utilized as essential nutrients. Phosphates may also form precipitates, usually with calcium or magnesium. The resultant compounds are insoluble in water and become a part of the soil or sediment. The term biodegradability, as such, is not applicable to inorganic compounds.

Environmental effects: Sodium phosphate, tribasic: Aquatic toxicity: 96 hour LC(50)>100 mg/L, non-toxic (rainbow trout, inland silversides and mysid shrimp) FMC Studies 189-1081, - 1082. 48 hour EC(50) >100 mg/L, non-toxic (daphnia magna). FMC Study 189-1084.

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 receive proper notification of spill and disposal of waste, if required.
SECTION 14 - TRANSPORT INFORMATION

Proper Shipping Name: Corrosive Solids, N.O.S. (containing sodium hydroxide, sodium metasilicate anhydrous)

Hazard Class: 8

UN#: UN1759

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.

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 phosphate, tribasic - 5,000 lbs. Glycol ethers - 1 lb. to Air. 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.

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 carbonate - 1%. Sodium metasilicate - 1%. Sodium hydroxide - 1%. Ethanol - 0.1%.

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. Sodium metasilicate anhydrous.

**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.

Health 2 / 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 ingredients 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.

This product may contain trace amounts of ethanol, ethylene oxide, and 1,4-dioxane. The trace amounts of these hazardous components individually and/or collectively are not expected to result in either acute or long-term hazards when this product is handled according to instructions. You should know though, ethanol is classified as a depressant drug. Ethylene oxide and 1,4-dioxane are classified as carcinogens and reproductive hazards.

**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.

Glycol ethers appears on the initially proposed HAP list in the amendments.

**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

**NAME:** Robert C. Jaudon (636) 296-3131, 296-3888  **DATE ISSUED:** 09/19/03

**DATE REVISED:** 10/07/05

< = LESS THAN  **N/A = NOT APPLICABLE**

> = MORE THAN  **N/D = NOT DETERMINED**

UNK = UNKNOWN  **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 15 - HMIS Ratings updated