SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ECONOMY SOUR

CHEMICAL NAMES & SYNONYMS: N/A

FORMULA: Proprietary

CHEMICAL FAMILY: Inorganic fluorides

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

INGREDIENTS PERCENT ADOPTED VALUES
Sodium Silicofluoride CAS # 16893-85-0

(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

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

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

EFFECTS OF OVEREXPOSURE: Symptoms of exposure: Prickling or burning sensation of skin and mucous membranes. Coughing, sneezing, tightness of chest, difficulty in breathing. Inhalation of dust or mist may cause severe mucous membrane irritation and burns. Effects may not be immediately apparent, especially with dilute solutions. Chronic exposure causes severe skin irritation and burns. Ingestion or inhalation may be harmful and possibly fatal depending on severity and length of over-exposure. Chronic over exposure may cause fluorosis. Product may be absorbed through the skin and produce signs of fluorosis such as weight loss, brittleness of bones, anemia, weakness and stiffness of joints. Internal bleeding may develop. Large doses can cause nausea, vomiting, diarrhea, abdominal burning, nervous complaints, and skin rashes may occur.

SUPPLEMENTAL HEALTH INFORMATION: Pre-existing eye, skin and respiratory disorders may be aggravated by exposure. Not listed as carcinogenic by IARC, NTP, OSHA or ACGIH. Not known to be mutagenic.

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.)

SECTION 5 - FIRE & EXPLOSION HAZARDS / FIRE FIGHTING MEASURES

Flash Point: None

Flammable Limits: N/A

Extinguishing Media: As appropriate for surrounding fire.

Special Fire Fighting Procedures: Use NIOSH/MSHA approved, self-contained breathing apparatus and impervious clothing where this material is involved in a fire.

Unusual Fire and Explosion Hazards: Highly toxic Na(2)O, HF, and F-fumes formed in a fire.
SECTION 6 - ACCIDENTAL RELEASE MEASURES

Steps to be taken if material is released or spilled: Keep unnecessary people away. Isolate spill area and deny entry. Avoid breathing dust. Wear respiratory equipment and protective clothing. Employees should be trained in safety procedures for handling this product. Carefully shovel material and place in clean, dry container and cover. Remove container from spill site and dispose of in accordance with federal, state and local regulations.

SECTION 7 - HANDLING AND STORAGE

Precautions to be taken in handling and storing: Store in a cool, dry well-ventilated area. Do not store near food or feed especially since this material has the same appearance as common edibles such as salt, sugar, etc. Do not apply to foliage, fruit, vegetables or fodder. Do not store near acid.

Other Precautions: If product should become heated in excess of 100 deg. C, it will decompose, releasing highly toxic hydrogen fluoride gas. If contact with water occurs, hydrofluoric acid will form which is highly corrosive.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: A NIOSH approved respirator should be worn. Self-contained breathing apparatus may be required when chemical is heated to decomposition or in a spill area.

Ventilation Required: Local mechanical exhaust ventilation recommended to minimize employee exposure.

Protective Clothing: Splash-proof goggles should be worn when there is danger of splash from solution containing product. Protect against splash or mist from solution containing chemical with 8 inch minimum face shield. Eye protection should be worn at all times. Impervious gloves should be worn. Protective, impervious clothing should be worn to prevent contact with skin, (coveralls, boots, etc.).

Other Protective Clothing and Equipment: Protect open wounds. Heating to decomposition requires full protective clothing and self-contained breathing apparatus.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Blue, free flowing fine granular material.

State: Solid

Odor: Irritating

Solubility in water: Complete

pH: (1 % solution): 3.5 typical

Boiling Point: Decomposition begins at 100 deg. C.

SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable

Incompatibility: Avoid contact with acids, water, glass, silicon tetrafluoride, alkalis. Avoid storage under moist conditions. Protect from high temperatures.

Hazardous Decomposition: Silicon fluorides; hydrogen fluoride, sodium oxide and fluorine fumes, hydrogen fluoride gas.

Hazardous Polymerization: Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

Toxicological Information: Sodium silicofluoride: Acute dermal LD(50) > 2 g/kg (rabbit). Acute inhalation: LC(50) > 200 mg/L for 1 hour (rat). Acute Oral LD(50): 125 mg/kg (rats).

Chemical Fate Information: Acute Inhalation/ingestion can cause death.

SECTION 12 - ECOLOGICAL INFORMATION

N/D
SECTION 13 - DISPOSAL CONSIDERATIONS

Dispose of contaminated product, empty containers and materials used in cleaning up spills or leaks at an approved facility in accordance with applicable federal, state and local regulations.

SECTION 14 - TRANSPORT INFORMATION

Proper Shipping Name: Fluorosilicates, N.O.S.

Hazard Class: 6.1

UN#: 2856

Packing Group: III

Sticker Required: Keep away from food.

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.

No ingredients listed.

**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.

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

No ingredients listed.
**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 fluoroaluminate

**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 silicofluoride - Health 2 / Fire 0 / Reactivity 0.

**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, but should be treated at Fluorides.

**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 ingredients listed.

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

No ingredients listed.

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**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  
DATE ISSUED: 8/1/02  
DATE REVISED: 7/1/04

< = 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