MATERIAL SAFETY DATA SHEET
PROSOCO, Inc.

I PRODUCT IDENTIFICATION

MANUFACTURER'S NAME AND ADDRESS:	PROSOCO, Inc. 3741 Greenway Circle Lawrence, KS 66046	**EMERGENCY TELEPHONE NUMBERS:** **8:00 AM – 5:00 PM CST Monday-Friday:** **NON-BUSINESS HOURS (INFOTRAC):**	 785-865-4200 800/535-5053

PRODUCT TRADE NAME: **Enviro Klean® SafRestorer**

II HAZARDOUS INGREDIENTS

CHEMICAL NAME	(COMMON NAME)	CAS NO.	NFPA CODE	ACGIH TLV/TWA	OHSA PEL/TWA
Glycolic Acid	(Hydroxyacetic Acid)	79-14-1	3,0,0-	Not listed	Not listed
Amidosulfonic Acid	(Sulvamic Acid)	5329-14-6	2,1,1,-	Not listed	Not listed
Ammonium Bifluoride	(Ammonium Difluoride)	1341-49-7	3,0,2,9	2.5 mp(F)/m3	2.5mg(f)/m3
Surfactant Mixture	(Surfactant Mixture)	Unknown		Not listed	Not listed

III PHYSICAL DATA

	BOILING POINT (°F)	VAPOR PRESSURE (mm Hg)	VAPOR DENSITY (Air = 1)	EVAPORATION RATE (Butyl Acetate = 1)
Glycolic Acid	234°F	17.5 (68°F)	1.7	N/A
Amidosulfonic Acid	408°F	<0.01 (68°F)	N/A	N/A
Ammonium Bifluoride	464°F	N/A	N/A	N/A
Surfactant Mixture	100°F	Unknown	Unknown	Unknown

	SPECIFIC GRAVITY	SOLIBILITY IN WATER	APPEARANCE AND ODOR
Enviro Klean® SafRestorer	1.11	Complete	Clear liquid, mild odor

IV FIRE AND EXPLOSION HAZARD DATA

EMERGENCY OVERVIEW

Enviro Klean® SafRestorer is a moderately corrosive material that may cause damage to skin, eyes and mucous membranes. Burns form this product may not be immediately painful or evident. Wear proper safety equipment to avoid exposure. Wash immediately after exposure. Exposures may require fluoride specific treatment.

FLASH POINT (METHOD): None.

FLAMMABLE LIMITS: Not applicable.

EXTINGUISHING MEDIA: Not applicable.

SPECIAL FIRE FIGHTING PROCEDURES: Wear NIOSH/MSHA approved self-contained breathing apparatus with a full face piece operated in pressure demand or other positive pressure mode and full body protective clothing when fighting fires. Generates heat upon addition of water with possible spattering. Water may be used to keep fire exposed containers cool until fire is out. Water or foam may cause frothing which can be violent and endanger the life of the fire fighter, especially if sprayed into containers of hot, burning liquid.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Reacts with most metals to release hydrogen gas which can form explosive mixtures with air.

V HEALTH HAZARD DATA

PRIMARY ROUTES OF EXPOSURE: Inhalation, skin, eyes

CARCINOGEN INFORMATION: Not listed (OSHA, IARC, NTP)

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE: No applicable information found.

EFFECTS OF OVER EXPOSURE: Causes severe damage to eyes. Causes burns to skin. Breathing of mist or dust can damage nasal and respiratory passages. Swallowing results in damage to mucous membranes and deep tissue; can result in death on penetration to vital areas. Bronchitis, pulmonary edema and chemical pneumonitis may occur from inhalation of vapors or mists.

EYE CONTACT: Liquid or concentrated vapors can cause eye irritation, severe burns and permanent damage.

SKIN CONTACT: Vapors, mists and liquid are corrosive to the skin. Vapors will irritate the skin. Liquid and mists will burn the skin. Prolonged liquid contact will burn or destroy surrounding tissue.

INHALATION: Vapors and mists are corrosive to the nose, throat, and mucous membranes. Bronchitis, pulmonary edema, and chemical pneumonitis may occur. Irritation, coughing, chest pain, and difficulty in breathing may occur with brief exposure. Prolonged exposure may result in more severe irritation and tissue damage.

INGESTION: Vapors, mists, and liquid are corrosive to the mouth and throat. Swallowing the liquid burns the tissues, causes abdominal pain, nausea, vomiting and collapse. Swallowing large quantities can cause death.

EMERGENCY AND FIRST AID PROCEDURES:

EYE CONTACT: Irrigate eyes for 15-30 minutes with water, keeping eyelids apart and away from eyeballs during irrigation. Get medical attention immediately, preferably an eye specialist. If a physician is not immediately available, apply 1 or 2 drops of 0.5% Pontocaine® Hydrochloride solution followed by a second irrigation for 15 minutes. Do not use the solution described for skin treatment.

Irrigate with 1% calcium gluconate in normal saline for 1 to 2 hours to prevent or lessen corneal damage.

SKIN CONTACT: Immediately place under a safety shower or wash the burned area with a water hose. Remove all contaminated clothing while washing continuously. Keep washing with large amounts of water for 15 to 20 minutes. After washing, the burned area should be immersed in a solution of 0.13% Zephiran® Chloride. If immersion is not practical, towels should be soaked with the above solution and used as compresses for the burned area. The compresses should be changed every 2 minutes and continue until pain is relieved, up to 4 to 6 hours. Alternatively, 2.5% calcium gluconate gel may be promptly and continuously massaged into the burned area until the pain is relieved. Seek medical attention immediately for all burns.

INHALATION: Immediately remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration, but NOT mouth-to-mouth.

INGESTION: Drink large amounts of water to dilute. DO NOT induce vomiting. Several glasses of milk or several ounces of milk of magnesia may be given for their soothing effect. Seek medical attention.

NOTE TO PHYSICIAN: For larger burns, if pain is not relieved by soaking in Zephiran® or by calcium gluconate gel, inject sterile 5% aqueous calcium gluconate solution subcutaneously beneath, around, and in the burned area. Initially use no more than 0.5 cc per square centimeter and do not distort appearance of skin. If pain is not completely relieved, additional treatment is indicated. (5% calcium gluconate solution may be prepared by mixing equal parts of 10% calcium gluconate solution with normal saline. For burns of large skin areas, (greater than 25 square inches), for ingestion and for significant inhalation exposure, severe systemic effects may occur. Monitor and correct for hypocalcemia, cardiac arrhythmias, hypomagnesemia and hyperkalemia. In some cases renal dialysis may be indicated. For certain burns, especially of the digits, use of intra-arterial calcium gluconate may be indicated.

VI REACTIVITY DATA

STABILITY: Stable.

CONDITIONS TO AVOID: Contact with strong bases (alkali), can cause violent reaction generating large amounts of heat. Avoid heat, sparks, or open flame.

INCOMPATIBILITY (MATERIALS TO AVOID): Alkaline materials, metals, oxidizing materials, cyanides, sulfides, combustible materials, organic peroxides, strong reducing agents, carbides, chlorates, nitrates, picrates, fulminates and reducing materials.

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, hydrogen when in contact with metal. May release sulfur dioxide, hydrogen cyanide, or hydrogen sulfide.

VII SPILL OR LEAK PROCEDURES

SPILL, LEAK, WASTE DISPOSAL PROCEDURES: Provide adequate ventilation, eliminate sources of ignition. Evacuate immediate area where concentrated fumes are present. Cleanup personnel must wear proper protective equipment. Contain spilled material with dikes, etc., and prevent runoff into ground and surface waters or into sewers.

Spills and leaks should be neutralized by pouring dry soda ash or lime over the affected area to absorb as much liquid as possible. Allow powdered material to remain on spill for five to ten minutes and flush thoroughly with water. Neutralized material, both liquid and solid, must be recovered for proper disposal.

WASTE DISPOSAL METHODS: Recovered solids or liquids may be sent to a licensed reclaimer or disposed of in a permitted waste management facility. Consult federal, state, and/or local authorities for approved procedure.

NOTE: Empty containers can have residues, gases and mists and are subject to proper waste disposal.

VIII SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: For vapor or mist concentrations which exceed or are likely to exceed $1/m^3$ Threshold Limit Value (TLV), wear a NIOSH/MSHA approved full face respirator. NIOSH/MSHA approved self-contained breathing apparatus with full face piece should be worn when concentrations exceed 100 ppm or during leaks and/or emergencies. Follow all applicable respirator use, standards or regulations. (Also contact your safety equipment supplier for proper NIOSH/MSHA approved units.)

VENTILATION: Provide sufficient explosion-proof general and/or local exhaust ventilation to maintain exposure below the TLV.

PROTECTIVE CLOTHING: Wear acid-resistant neoprene or PVC rain suit and rubber boots with protective pants outside.

PROTECTIVE GLOVES: Rubber gloves with gauntlets.

EYE PROTECTION: Chemical splash goggles and full face shield. Do not wear contact lenses because they may contribute to the severity of an eye injury.

OTHER PROTECTIVE EQUIPMENT: An eyewash and safety shower should be nearby and ready for use.

IX SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Use proper safety equipment (see section VIII) when handling. Store in a cool, well-ventilated area. Separate from oxidizing agents, nitric acid, alkalis, chlorates, sulfides, etc. (see section VI). Store in proper acid-resistant containers such as rubber-lined steel, glass, or plastic. Emptied containers retain product residues (vapor, liquid, and/or solid). Do not cut, grind, weld, or drill on or near this container. All hazard precautions given in this data sheet must be observed.

OTHER PRECAUTIONS: Do not get in eyes, on skin or on clothing. Can cause injury or blindness. Avoid breathing mist or vapor. Provide ventilation sufficient to limit employee exposure below OSHA permissible limit. Do not take internally. Wash thoroughly after handling. Empty containers should be treated as if they were full.

X REGULATORY INFORMATION

SHIPPING: The proper shipping description for this product is **UN1760, Corrosive Liquid, N.O.S. (Hydroxyacetic and Sulfamic Acid) , 8, II** when shipped in its original packaging. This product and packaging combination may not be allowed in air transport.

NATIONAL MOTOR FREIGHT CLASSIFICATION:

SARA 313 REPORTABLE:

CHEMICAL NAME	CAS	UPPERBOUND CONCENTRATION % BY WEIGHT
None		

CALIFORNIA PROPOSITION 65: **This product contains no chemicals listed under California's Proposition 65.**

XI OTHER

MSDS Status:

Date of Revision: December 20, 2010

For Product Manufactured After: February 17, 2007; No product reformulation.

Changes: N/A. Regulatory Review for Canadian Customer to update for current date. No formulation change.

Item #: 41016

Approved By: Regulatory Department

DISCLAIMER:

The information contained on the Material Safety Data Sheet has been compiled from data considered accurate. This data is believed to be reliable, but it must be pointed out that values for certain properties are known to vary from source to source. **PROSOCO, Inc. expressly disclaims any warranty express or implied as well as any liability for any injury or loss arising from the use of this information or the materials described**. This data is not to be construed as absolutely complete since additional data may be desirable when particular conditions or circumstances exist. It is the responsibility of the user to determine the best precautions necessary for the safe handling and use of this product for his unique application. This data relates only to the specific material designated and is not to be used in combination with any other material. Many federal and state regulations pertain directly or indirectly to the product's end use and disposal of containers and unused material. It is the purchaser's responsibility to familiarize himself with all applicable regulations.

DATE OF PREPARATION: December 20, 2010