

MATERIAL SAFETY DATA SHEET



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: 785-865-4200
NON-BUSINESS HOURS (INFOTRAC): 800/535-5053

PRODUCT TRADE NAME: Sure Klean® Restoration Cleaner

II HAZARDOUS INGREDIENTS

CHEMICAL NAME	(COMMON NAME)	CAS NO.	NFPA CODE	ACGIH TLV/TWA	OSHA PEL/TWA
Glycolic Acid	(Hydroxyacetic Acid)	79-14-1	3,0,0,-	Not listed	Not listed
Hydrofluoric Acid	Hydrogen Fluoride	7664-39-3	4,0,1,-	3 ppm	3ppm
Nonionic surfactant	Nonionic Surfactant	*	3,1,0,-	1 ppm	1 ppm
1,2-Ethanediol	Ethylene Glycol	107-21-1	1,1,0,-	50 ppm	50 ppm
Orthophosphoric Acid	Phosphoric Acid	7664-38-2	3,0,1,-	1 mg/m ³	1 mg/m ³

* Exact chemical identity withheld as Trade Secret pursuant to OSHA regulations.

III PHYSICAL DATA

	BOILING POINT (°F)	VAPOR PRESSURE (mm Hg)	VAPOR DENSITY (Air = 1)	EVAPORATION RATE (Butyl Acetate = 1)
Glycolic Acid	234	17.5 (68°F)	1.7	N/A
Hydrofluoric Acid	224	27 (70°F)	2.21 @ 70°F	N/A
Nonionic surfactant	360	< 0.01 (36°F)	> 1	< 0.01
1,2-Ethanediol	387	0.12 (45°F)	2.14	N/A
Orthophosphoric Acid	243	0.0285 (36°F)	N/A	N/A

	SPECIFIC GRAVITY	SOLIBILITY IN WATER	APPEARANCE AND ODOR
Restoration Cleaner	1.050	Complete	Clear liquid with irritating odor

IV FIRE AND EXPLOSION HAZARD DATA

EMERGENCY OVERVIEW

Sure Klean® Restoration Cleaner is a highly corrosive material that may cause damage to skin, eyes and mucous membranes. Burns from this product may not be immediately painful or evident. Exposures to large skin areas may be fatal. Wear proper safety equipment to avoid exposure. Wash immediately after exposure. Exposures may require fluoride specific treatment.

FLASH POINT (METHOD): Not applicable.

FLAMMABLE LIMITS: No applicable information found.

EXTINGUISHING MEDIA: No applicable information found.

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. Flammable and explosive mixtures are unlikely except in poorly ventilated or confined areas.

V HEALTH HAZARD DATA

PRIMARY ROUTES OF EXPOSURE: Skin, eyes, inhalation.

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

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE: Pre-existing skin, eye or respiratory disorders, or impaired kidney function may be aggravated.

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. Ethylene glycol has been shown to produce dose-related teratogenic in rats and mice.

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. Burns from this product may be delayed as long as 24 hours after initial exposure. Exposures to large skin areas may cause potentially fatal hypocalcaemia.

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. Ingestion can cause death. This product contains ethylene glycol, which is lethal to humans in estimated doses as low as 3 fluid ounces (100 mL).

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. Use of local anesthetics is not recommended as effectiveness of treatment is indicated by cessation of pain.

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. 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.

Dilute spilled product with water to reduce fuming during cleanup work and reaction of neutralizing substances. 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 disposed of in a permitted waste management facility. Neutralized materials may be discharged to a sanitary sewer with approval of the receiving treatment plant. Typical pH range of 6-10 is generally considered appropriate for discharge. Consult federal, state, and/or local authorities for approved procedure. For additional information regarding handling and disposal of rinse-water, please review Technical Bulletin 200-CW "Controlled Handling of Cleaning Wastewater". Empty containers must be triple rinsed before disposal in a permitted sanitary landfill. Check local restrictions.

VIII SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: If you notice irritation or if air monitoring indicates hydrogen fluoride concentrations above the TLV, wear a NIOSH approved half-mask respirator with acid vapor cartridges. Exposures to phosphoric acid above its TLV is unlikely because of its low vapor pressure. Supplied air is required for phosphoric acid exposures in excess of the TLV. A dust/mist respirator may be worn to avoid nuisance level exposure to mists generated during application or removal of this product.

VENTILATION: Provide sufficient 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/or 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

WORK PRACTICES: Proper work practices and planning should be utilized to avoid contact with workers, passersby, and non-masonry surfaces. Do not atomize during application. Beware of wind drift. Wind-drift hazards may be diminished by pre-rinsing with low-pressure water before pressure washing. Divert pedestrian traffic around work areas. See the Product Data sheet and label for specific precautions to be taken during use. Smoking, eating and drinking should be discouraged during the use of this product. Wash hands after handling or use.

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). 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: **Corrosive liquid, toxic, n.o.s. (Hydrofluoric and Phosphoric acid), 8(6.1), UN2922, II** when shipped in its original factory packaging. This product and packaging combination is not allowed in air transport. Special packaging is required for shipping by small parcel carriers and is limited to 1 quart per package. Call PROSOCO's Regulatory Department for additional information.

NATIONAL MOTOR FREIGHT CLASSIFICATION: 45615 Sub 5 Class Rate: 92.5

SARA 313 REPORTABLE:

CHEMICAL NAME	CAS	UPPERBOUND CONCENTRATION % BY WEIGHT
Hydrogen Fluoride	7664-39-3	10%
Ethylene Glycol	107-21-1	10%

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

XI OTHER

MSDS Status: **Date of Revision:** February 8, 2005
For Product Manufactured After: February, 2005
Changes: Updated National Motor Freight Classification, Section X
Item #: 20030
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: February 8, 2005