

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: Enviro Klean[®] BioKlean[™] Cleaner

II HAZARDOUS INGREDIENTS

CHEMICAL NAME	(COMMON NAME)	CAS NO.	NFPA CODE	ACGIH TLV/TWA	OSHA PEL/TWA
Sodium Hydroxide	Caustic Soda	1310-73-2	3,0,1,-	2mg/m ³	2mg/m ³
Amine Oxide	Amine Oxide	68478-65-9	3,2,0,-	Not established	Not established

Percent content of hazardous ingredients withheld as trade secret pursuant to OSHA regulations.

III PHYSICAL DATA

	BOILING POINT (°C)	VAPOR PRESSURE (mm Hg)	VAPOR DENSITY (Air = 1)	EVAPORATION RATE (Butyl Acetate = 1)
Sodium Hydroxide	145°C	6.33 (40°C)	Not Available	Not Available
Amine Oxide	79°C	90.0 (100 °F)	2.07	Not Available

	SPECIFIC GRAVITY	pH	SOLIBILITY IN WATER	APPEARANCE AND ODOR
Enviro Klean [®] BioKlean [™] Cleaner	1.09	13.7	100%	Light yellow liquid, soapy odor

IV FIRE AND EXPLOSION HAZARD DATA

EMERGENCY OVERVIEW

Enviro Klean[®] BioKlean[™] Cleaner is a corrosive, caustic material. Prevent skin, eye and respiratory contact. Exposed areas must be rinsed immediately with large quantities of water. May react violently when in contact with strong acids.

FLASH POINT (METHOD): None.

FLAMMABLE LIMITS: Not applicable.

EXTINGUISHING MEDIA: Use water spray to cool fire exposed surfaces and to protect personnel. Use media appropriate for surrounding fire.

SPECIAL FIRE FIGHTING PROCEDURES: Use NIOSH/MSHA approved self-contained breathing apparatus where this material is involved in a fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Can react with metals such as aluminum, magnesium, copper, zinc, tin, brass or bronze, to generate hydrogen gas, which is flammable and/or explosive if ignited. Avoid contact with leather, wool, acids, organic halogen compounds, or organic nitro compounds.

V HEALTH HAZARD DATA

PRIMARY ROUTES OF EXPOSURE: Skin, eyes, ingestion.

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

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE: No applicable information found.

EFFECTS OF OVEREXPOSURE: Corrosion of exposed tissues resulting in burns and frequently deep ulcerations.

EYE CONTACT: Can cause severe damage and even blindness very rapidly. Small quantities can result in permanent damage and/or loss of vision.

SKIN CONTACT: Causes severe burns, possible deep ulceration and scarring. Prolonged contact destroys tissue. Can cause irritant dermatitis. Onset of irritation from burns may be delayed for minutes in the case of contact with concentrated product or hours for contact with product diluted by rinse water.

INHALATION: Mists are very irritating to upper respiratory tract. Can cause tissue damage to upper respiratory tract. Can cause pneumoconiosis, including fibrosis.

INGESTION: Results in severe damage to mucous membranes and deep tissues; can result in death on penetration to vital areas.

EMERGENCY AND FIRST AID PROCEDURES:

EYE CONTACT: Immediately flush exposed area with water for at least 30 minutes, holding eyelids apart to ensure flushing of the entire eye surface. Get immediate medical attention. If physician is not immediately available, continue flushing with water. Do not use chemical antidote. Washing eyes within seconds is essential to achieve maximum effectiveness.

SKIN CONTACT: Immediately flush exposed area with water for at least 30 minutes. Presence of a slippery residue indicates that some caustic still remains. Get medical attention. Remove contaminated clothing. Launder contaminated clothing before reuse. Discard contaminated shoes.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth by a trained person. If breathing is difficult, give oxygen. Get medical attention.

INGESTION: DO NOT INDUCE VOMITING! Dilute by giving large amounts of water or milk if immediately available. Give milk of magnesia. If person is unconscious, do not give anything by mouth. Get medical attention immediately.

NOTE TO PHYSICIAN:

EYES: May cause severe corneal injury or burn. May cause impairment of vision. Stain for evidence of corneal injury. If cornea is burned, instill antibiotic steroid preparation frequently. Consult ophthalmologist.

SKIN: May cause severe burn. If burn is present, treat as any thermal burn.

RESPIRATORY: May cause severe irritation. Administer oxygen if available. Bronchodilator, expectorants, and antitussives may be of help. (Tracheal and/or esophagosopic control.)

GENERAL: Consult standard literature. Treatment should be based on the sound judgment of the physician and the individual reactions of the patient. Treat for clinical symptoms.

VI REACTIVITY DATA

STABILITY: Stable.

CONDITIONS TO AVOID: Strong acids.

INCOMPATIBILITY (MATERIALS TO AVOID): Organic materials, concentrated acids, metals such as aluminum, magnesium, zinc, tin, chromium, brass, bronze, or copper. Food, sugars, leather, and wool.

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS: Contact with reactive metals will generate hydrogen gas, which is flammable and/or explosive. Contact with various food sugars may form carbon monoxide.

VII SPILL OR LEAK PROCEDURES

SPILL, LEAK, WASTE DISPOSAL PROCEDURES: Wear appropriate NIOSH/MSHA approved respirator and other protective safety equipment. Dike area to contain the spill. Dilute the spill with large amounts of water, then neutralize with dilute acid. A vacuum truck or corrosion resistance wet-vac may be used to pick up large quantities of neutralized residual material for disposal. After all visible traces have been removed; flush the area with large amounts of water.

WASTE DISPOSAL METHODS: Dispose of in a manner approved for this material or in an approved hazardous waste 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: Evolution of airborne sodium hydroxide from this product is unlikely, except if atomized or applied to hot surfaces. NIOSH/MSHA approved respiratory protection required in the absence of proper environmental control. If air monitoring indicates that the concentration of sodium hydroxide exceeds the TLV, wear a NIOSH approved powered air-purifying or full-face cartridge type respirator with dist/mist cartridges. Respiratory protection program must be in accordance with 29 CFR 1910.134.

VENTILATION: Sufficient to maintain airborne concentrations below the Threshold Limit Values TLV(s).

PROTECTIVE CLOTHING: Wear protective clothing such as rubber boots, PVC clothing, and plastic headgear as required to prevent skin contact.

PROTECTIVE GLOVES: Alkali-resistant such as nitrile rubber, neoprene rubber, natural rubber, or PVC.

EYE PROTECTION: Close fitting chemical safety 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: Safety shower and eyewash. Personal protective clothing and use of equipment must be in accordance with 29 CFR 1910.133 and 29 CFR 1910.132.

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 minimized by pre-rinsing product off of the substrate with low-pressure water immediately before pressure washing. See the Product Data sheet and label for specific precautions to be taken during use. Smoking, eating and drinking should be prohibited during the use of this product. Wash hands before breaks and at the end of a shift.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Wear appropriate safety equipment and clothing. Do not get in eyes, on skin, or on clothing. Do not take internally.

Avoid breathing mist. Store in a cool, dry, well-ventilated place. Separate from acids, explosives, organic peroxides, and easily ignitable materials.

Keep containers tightly closed when not dispensing product. Use care around spilled material because it will be slippery. Never touch eyes or face with hands or gloves that may be contaminated with this product. Treat empty containers as if they were full.

OTHER PRECAUTIONS: Do not get in eyes, on skin or on clothing. Can cause severe injury or blindness. Do not breathe mist. Do not take internally. Wash thoroughly after handling. Do not eat, drink, or smoke in work areas.

Comments: Hazardous carbon monoxide gas can form upon contact with food and beverage products in enclosed vessels and can cause death.

X REGULATORY INFORMATION

SHIPPING: The shipping description for this product is **Corrosive liquid, basic, inorganic, n.o.s. (Sodium hydroxide) 8, UN3266, II** when shipped via domestic or international ground or marine transport. This product and container combination is not allowed in air transport.

NATIONAL MOTOR FREIGHT CLASSIFICATION: NMFC #: 44157 Sub 3 Rate Class: 85

SARA 313 REPORTABLE:

CHEMICAL NAME	CAS	UPPERBOUND CONCENTRATION % BY WEIGHT
None		

CALIFORNIA PROPOSITION 65: N/A

XI OTHER

MSDS Status: **Date of Revision:** February 7, 2005
For Product Manufactured After: February, 2005
Changes: Updated National Motor Freight Classification, Section X
Item #: 41040
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 7, 2005