

MATERIAL SAFETY DATA SHEET

(PREPARED ACCORDING TO 29CFR 1910.1200)

DATE PREPARED: 05/28/99

Kai Dri

SECTION 1- PRODUCT IDENTIFICATION

Manufacturer: KaiVac, Incorporated
Address: 401 S. Third St., Hamilton, OH 45011
Trade Name: KaiDri

Emergency Phone: InfoTrac 800-535-5053
Information Phone: 800-287-1136
Product Type: Rinse additive
Formula: Proprietary

SECTION 2- INGREDIENTS

CHEMICAL NAME	CAS NO.	% Wt.:	TWA (ppm):	STEL (ppm):	Source	Carcinogen?
C12-C14 linear alcohol ethylene oxide/ Propylene oxide adduct	68439-51-0	<10	N.E.	N.E.	OSHA	No
Ethylene glycol monobutyl ether	111-76-2	<10	25 (skin)	N.E.	OSHA	No

SECTION 3- PHYSICAL AND CHEMICAL DATA

Boiling point @ 760 mm Hg (F):	210	Specific gravity or bulk density:	1.001
pH:	5-9	Vapor Pressure mmHg @ 20 degrees C:	Not determined
Vapor density (Air=1):	Not determined	Solubility in water:	100%
Evaporation rate (BuAc=1):	Not determined	Freezing point (degrees F):	Approx. 30
Appearance and odor:	Clear liquid with slight odor	% Volatile by weight (%):	100

SECTION 4- FIRE AND EXPLOSION DATA

Flash point (degrees F) and test method:	Non-flammable	Autoignition temperature:	N/A
Flammability limits in air (% V):	N/A		
Extinguishing media:	No restrictions known; use media appropriate for surrounding materials.		
Special fire fighting procedures:	Recommend that self-contained breathing apparatus and protective clothing be worn in areas where this product is involved in a fire.		
Unusual fire and explosion hazards:	None known		

SECTION 5- REACTIVE DATA

Stability:	Stable under normal use	Incompatibility:	Strong acids and oxidizers
CONDITIONS TO AVOID:	High temperatures	HAZARDOUS DECOMPOSITION:	Oxides of nitrogen and carbon may be formed when heated to dryness
HAZARDOUS POLYMERIZATION:	Will not occur		

SECTION 6- HEALTH HAZARD DATA

Primary routes of exposure: Eye: X Skin: X Inhalation: X Ingestion: X Other:

Signs and symptoms of over-exposure (Acute): Irritation to tissues contacted. Large doses may be fatal if ingested.

Signs and symptoms of over-exposure (Chronic): May cause primary irritant dermatitis. May cause upper respiratory irritation.

Skin contact: May cause irritation to skin and may be toxic if absorbed through the skin in large amounts.

Eye contact: May cause severe eye irritation, experienced as mild discomfort and seen as slight excess redness of the eye.

Inhalation: Vapors or mist, in excess or permissible concentrations, or in unusually high concentrations generated from spraying, heating the material or as from exposure in poorly ventilated area or confined spaces, may cause irritation of the nose and throat, headache, nausea, drowsiness and are toxic if inhaled.

SECTION 7- EMERGENCY AND FIRST AID PROCEDURES

Eyes: Immediately flush with plenty of water for at least 15 minutes while holding eyelids apart. Get medical attention at once. Flushing must begin as soon as possible to minimize damage.

Skin: Promptly wash with plenty of soap and water. Remove clothing if contaminated and wash before reuse. Get medical attention if burns or irritation occur.

Ingestion: If conscious, immediately give 2 to 4 glasses of water and induce vomiting. Get medical attention at once.

Inhalation: Remove to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration. Get medical attention at once.

Special Notes: Treat symptomatically

SECTION 8- SPECIAL PROTECTION INFORMATION

Respiratory protection:	Use appropriate NIOSH approved respirator in accordance with 29 CFR 1910.132 and 1910.134 if conditions warrant.
Ventilation:	Local ventilation sufficient to maintain the TLV listed in section 2.
Eye protection:	Chemical splash goggles.
Other protective equipment:	Wear full work clothing, rubber apron and rubber gloves. A safety shower and eyewash fountain should be within the immediate work area for emergency use.

SECTION 9- SPILL OR LEAK PROCEDURES

Small spills/Large spills: Collect spilled liquid and place in a container for reuse or disposal. Flush spill area with water. All clean-up material should be removed for proper treatment or disposal. Spills on other than pavement (e.g. dirt or sand) may be handled by removing the affected soil and placing in approved containers.

Neutralizing materials: None

SECTION 10- STORAGE AND HANDLING INFORMATION

Precautions to be taken in handling and storage: Do not get in eyes, on skin, or breathe mists or vapors. Do not take internally. Keep containers closed when not in use. Do not eat, drink or smoke in work area.

SECTION 11- TOXICOLOGICAL INFORMATION

The following information is for the linear alcohol ethylene oxide/propylene oxide component: Oral LD₅₀(rat) 3.53g/kg Dermal LD₅₀(rabbit) 2.29g/kg
The following information is for the ethylene glycol monobutyl ether component: Oral LD₅₀(rat) 0.5-3.0g/kg Dermal LD₅₀(rabbit) 0.4g/kg

SECTION 12- REGULATORY INFORMATION

Section 313 Supplier Notification:

CAS Registry No.	Chemical Ingredients:	Percent Wt.
	Glycol Ethers	4.0