

Material Safety Data Sheet

May be used to comply with
OSHA's Hazard Communication Standard
29 CFR 1910.1200. Standard must be
consulted for specific requirements

U.S. Department of Labor

Occupation Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY

BEA KLEEN (200049)

*Note: Blank spaces are not permitted. If any item is not applicable, or no
information is available, the space must be marked to indicate that.*

Section I

Manufactured For Beaver Research Company	Emergency Telephone Number 1-800-255-3924 (Chem-Tel)
Address (Number, Street, City, State, and ZIP Code) 3700 E. Kilgore Road, Portage, MI 49002	Telephone Number For Information 1-800-544-0133
HMIS RATING: (Based on Aerosol Concentrate): 0-Minimal; 1-Slight; 2-Moderate; 3-Serious; 4-Extreme HEALTH 3 REACTIVITY 0 FLAMMABILITY...0 PERSONAL PROTECTION: C	Date Prepared 08/26/2003 Signature of Preparer (optional)

Section II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))		OSHA PEL	TWA-TLV	STEL-TLV	% (optional)
Phosphoric Acid	7664-38-2	None	1mg/M3	3mg/M3	<25%
Citric Acid	77-92-9	N/A	N/A	N/A	<10%

Section III - Physical/Chemical Characteristics

Boiling Point	210°F initial	Specific Gravity (H2O = 1)	1.11
Vapor Pressure (mm Hg) @68°F	N/A	% Volatile	80+
Vapor Density (AIR = 1)		Evaporation Rate (Butyl Acetate = 1)	
Solubility in Water	pH: <1	Total VOC:	
Complete			
Appearance and Odor			
Green liquid with pleasant odor.			

Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL
N/A	N/A	N/A	N/A
Extinguishing Media			
N/A			
Special Fire Fighting Procedures			
Avoid skin and eye contact, and breathing of acid vapors. Wear head and body protection and acid respirator if exposure to liquid is likely.			
Unusual Fire and Explosion Hazards			
N/A			

Section V - Reactivity Data

Stability	Unstable	Conditions to Avoid	None
	Stable	X	
Incompatibility (Materials to Avoid)			
Strong alkalis, materials not resistant to strong acids, active metals (zinc, aluminum, magnesium, etc.).			
Hazardous Decomposition or Byproducts			
Possible phosphorous oxide fumes at fire temperatures. Contact with active metals can release flammable gas.			
Hazardous	May Occur	Conditions to Avoid	None
Polymerization	Will Not Occur	X	

Section VI - Health Hazard Data

Route(s) of Entry:	Inhalation?	Skin?	Ingestion?
	Yes	Yes	Yes

Health Hazards (Acute and Chronic)

Skin: Corrosive. Causes irritation and burns.**Eyes:** Corrosive. Causes eye damage.**Inhalation:** Breathing of vapor can cause respiratory irritation and inflammation.**Ingestion:** Corrosive. Causes irritation and burning in mouth and throat.

Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulated?
N/A	No	No	No

Signs and Symptoms of Exposure

N/A

Medical Conditions Generally Aggravated by Exposure

N/A

Emergency and First Aid Procedure

Skin: Flush skin with water for 15 minutes. Get medical attention if irritation persists. Remove contaminated clothing and launder before re-use. Discard contaminated shoes. **Eyes:** Flush immediately with water for 15 minutes. Get prompt medical attention. **Inhalation:** Remove party to fresh air and give artificial respiration or oxygen if needed. **Ingestion:** Avoid swallowing. If swallowed, drink lots of water or, preferably, milk. Get medical attention if effects persist. Do not induce vomiting.

Section VII - Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled

Small spills can be flushed into normal drainage or into ground with copious amounts of water, or taken up with absorbent material. Larger spills should be contained by diking or other methods and held for collection and/or reuse, or for neutralization with alkali before collection and disposal. Personnel should use eye and skin protection.

Waste Disposal Method

If neutralized, may be disposable in sewers if local regulations permit. Otherwise, send to licensed treatment and disposal facility. As supplied, this product is a RCRA hazardous waste.

Precautions to be Taken in Handling and Storage

Check daily for any leaks from containers, vessels, pumps, and piping. Have water hoses and alkali (caustic soda, lime, etc.) convenient. Only use containers and equipment designed for acid service. Use a respirator if area is poorly ventilated.

Other Precautions

Areas of use and storage should be ventilated adequately to reduce vapors below odor level.

Section VIII - Control Measures

Respiratory Protection (Specify Type)

If necessary, wear approved acid vapor/mist respirator if exposure is likely.

Ventilation	Local Exhaust	Necessary for some operations	Special	N/A
	Mechanical(General)	Sufficient	Other	N/A

Protective Gloves

Wear acid resistant gloves if working with product concentrate.

Other Protective Clothing or Equipment

Eye Protection: Wear splash proof goggles or side shield safety glasses.

Work/Hygienic Practices

N/A