

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 pH Buffers 4.0, 6.86, 7.0, 9.18 and 10.0	<i>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.</i>
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Section I

Manufacturer's Name Ken Starr, Inc. (KSI)	Emergency Telephone Number 800-424-9300
Address (Number, Street, City, State, and ZIP Code) P. O. Box 20847 Portland, OR 97294	Telephone Number For Information 503-252-5742
	Prepared 7/08/2003
	Prepare L.B. Garrison

Section II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	NIOSH/ OSHA TWA	ACGIH TLV	Other Limits Recommended	% (option)
Potassium acid phthalate 877-24-7 (pH 4)				1.0
Sodium phosphate 7558-79-4 (pH 6.86, pH 7)				0.5
Potassium phosphate 7778-77-0 (pH 6.86, pH7)				0.5
Sodium borate 1303-96-4 (pH 9.18, pH 10)				0.5
Sodium azide 26628-22-8 (all)				2 ppm

HMS Rating

Health: 1 Flamm: 0 React: 0

Section III - Physical/Chemical Characteristics

Boiling Point	100°C	Specific Gravity (H2O = 1)	1.0
Vapor Pressure (mm Hg)	0	Melting Point	0°C
Vapor Density (AIR = 1) (NIA = No Information Available)	n/a	Evaporation Rate (Butyl Acetate = 1)	as water
Solubility in Water	complete		
Appearance and Odor	Clear. all buffers may be colored. If colored, pH 4=red; ph 6.86=orange; pH 7=yellow; ph 9.18=violet; pH 10=blue		

Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits n/a	LEL n/a	UEL n/
Extinguishing Media	Use media appropriate for the surrounding fire.		
Special Fire Fighting Procedures	none		
Unusual Fire and Explosion Hazards	none		

Section V - Reactivity Data

Stability	Unstable <input checked="" type="checkbox"/> Stable <input type="checkbox"/>	Conditions to Avoid	Avoid freezing.
Incompatibility (Materials to Avoid)	none		
Hazardous Decomposition or Byproducts			
Hazardous Polymerization	May Occur <input checked="" type="checkbox"/> Will Not Occur <input type="checkbox"/>	Conditions to Avoid	n/a

Section VI - Health Hazard Data

Route(s) of Entry:	Inhalation?	Skin?	Ingestion?
eyes, skin	unlikely	yes	yes
Health Hazards (Acute and Chronic)	Irritant		

Carcinogenicity: NTP? IARC Monographs? OSHA Regulated?
unknown n/a n/a n/a

Signs and Symptoms of Exposure

Irritation of skin or eyes.
Ingestion may cause vomiting or diarrhea

Medical Conditions Generally Aggravated by Exposure

Chronic skin exposure may cause dermatitis.
Chronic eye exposure may cause conjunctivitis

Emergency and First Aid Procedure

If skin contact occurs, wash with soap and water.
If eye contact occurs, flush with water.
Drink 2-3 glasses of water and induce vomiting if swallowed.

Section VII - Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled

Wipe or mop up small spills. Absorb large spills.

Waste Disposal Method

Dispose in compliance with all local, state and federal regulations.
Not a hazardous material.

Precautions to be Taken in Handling and Storage

Keep closed when not in use. Store at room temperature, 15-30°C.

Other Precautions

No special ventilation or respiratory protection is required. Wear eye protection

Section VIII - Control Measures

Respiratory Protection (Specify Type)

n/a

Ventilation	Local Exhaust	Special
	Mechanical(General)	Recommended
		Other

Protective Gloves

latex or vinyl

Other Protective Clothing or Equipment

lab apron

Work/Hygienic Practices

Avoid contact with these solutions to avoid sensitivity.

Disclaimer of Liability

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