

MATERIAL SAFETY DATA SHEET

KALO, Inc. • 13200 Metcalf Ave., Ste. 250 • Overland Park, KS 66213 • USA • Toll Free 800-255-5196 • 913-491-9125 • FAX 913-491-9146 • www.kalo.com

24 Hour Emergency Assistance CHEMTREC 1-800-424-9300

PRODUCT NAME: Buffer-X

PRODUCT CODE: BX01

I - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Buffer-X
PRODUCT CODE: BX01
PRODUCT CLASS: pH Buffering Agent
Date Prepared: 8/29/07
Prepared by: Safety Department

HMIS Codes	
Fire	3
Health	2
Reactivity	0
Protection	x

II - COMPOSITION/HAZARDOUS INGREDIENTS

OSHA Hazardous Components (29 CFR 1910.1200)

OCCUPATIONAL EXPOSURE LIMIT

INGREDIENT - ND

OSHA PEL Isopropyl Aclochol < 20% 400 ppm

OSHA PEL Phosphoric Acid <5% 1mg/m3

PERCENT % - ND

ACGIH TLV Isopropyl Aclochol < 20% 400 ppm

ACGIH TLV Phosphoric Acid <5% 1mg/m3

III - HEALTH HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

Eyes: May cause severe irritation. Prolonged or repeated contact may cause irreversible damage or blindness.

Ingestion: May cause irritation, burns, vomiting, nausea, and shock symptoms.

Skin: May cause severe irritation. Prolonged or repeated contact may cause burns.

Inhalation: May cause irritation.

Medical Conditions Aggravated: Skin and respiratory disorders.

Routes of Entry: Skin contact.

Target Organs: All tissues

IV - FIRST AID

Eyes:

Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek medical attention.

Ingestion:

If victim is conscious and alert, give 1 to 2 glasses of water to drink. Do not give anything by mouth to an unconscious person. Seek medical attention. Do not leave victim unattended.

Skin:

In case of contact, immediately wash with plenty of soap and water for at least 5 minutes. Seek medical attention. Remove contaminated clothing and shoes. Clean contaminated clothing and shoes before re-use.

Antidotes:

Treat symptomatically.
No specific antidote available.

Inhalation:

Inhalation is not an expected route of exposure. If respiratory irritation or distress occurs remove victim to fresh air. Seek medical attention if respiratory irritation or distress continues.

Note to Physician:

All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

V - FIRE-FIGHTING MEASURES

Flashpoint: >80°F (26.667°C)
Method: TCC
Flammable Limits: Not established
Autoignition Temperature: Not established
OSHA Flammability Class: IC
Extinguishing Media: Dry chemical, CO2, foam

Explosion Hazards: Product will burn under fire conditions. Closed containers may explode due to pressure build up when exposed to extreme heat.

Fire Fighting Equipment: Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.

Fire Fighting Procedures: Water mist may be ineffective, but may be used to cool closed containers.

VI - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Spill: Sweep, vacuum, or absorb with an inert absorbent for collection in an approved recovery drum for disposal. Wash area with water. Collect wash water for disposal. Always follow Federal, State and Local regulations regarding waste disposal.

VII - HANDLING AND STORAGE

MINIMUM STORAGE TEMPERATURES: ND

MAXIMUM STORAGE TEMPERATURES: 120° F

Handling: Avoid breathing vapors and mists. Avoid prolonged contact with skin and eyes.

Storage: Store in tightly closed original labeled containers. Store in a dry, well ventilated area away from ignition sources and incompatible material.

VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

PERSONAL HYGIENE IS AN IMPORTANT EXPOSURE CONTROL MEASURE.

THE FOLLOWING GENERAL MEASURES SHOULD BE TAKEN WHEN WORKING OR HANDLING THIS MATERIAL.

Personal Protection:

These recommendations provide general guidelines for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application.

Skin:

Skin contact should be minimized through the use of gloves and suitable long-sleeved clothing (i.e., shirts and pants.)

Respiratory:

Use NIOSH/MSHA approved respirator when exposure limits have been exceeded or are expected.

Eyes and Face:

The use of chemical safety glasses with side shields or splash proof goggles when using this product is recommended. An emergency eye wash and safety shower should be accessible to the work area.

Work Hygienic Practices:

- 1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.
- 2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
- 3) Wash exposed skin promptly to remove accidental splashes of contact with this material.

IX - PHYSICAL AND CHEMICAL PROPERTIES

Odor:	mild solvent	Density:	NA
Appearance:	liquid	Particle Size:	NA
Color:	pale yellow	Specific Gravity:	1.04
pH:	2- 3 (1% solution)	Viscosity:	Not established
Solubility in Water:	complete		

X - STABILITY AND REACTIVITY

Stable:	Yes
Conditions to Avoid:	Heat, open flame, spark
Hazardous Polymerization:	Will not occur
Hazardous Decomposition:	Carbon monoxide
Incompatible Materials:	Strong oxidizers and bases

XI - TOXICOLOGICAL INFORMATION

Acute Oral:	Not established	Eye Irritation:	Not established
Acute Dermal:	Not established	Skin Irritation:	Not established

XII - DISPOSAL CONSIDERATIONS

Empty Container: Since empty packaging contain residues of the product, all labeled hazard precautions should be observed. Triple rinse and offer for recycling. Always follow Federal, State and Local regulations regarding waste disposal.

XIII - TRANSPORTATION INFORMATION

DOT
REFER TO BILL OF LADING FOR CURRENT SHIPPING INFORMATION.

XIV - REGULATORY INFORMATION

SARA TITLE III (Superfund Amendments and Reauthorization Act)

311/312 Hazard Categories: Acute **313 Reportable Ingredients:** None present

TSCA Status: All chemical substances in this product are listed in the TSCA inventory.

XV - OTHER INFORMATION

THE INFORMATION IN THIS MSDS IS GIVEN IN GOOD FAITH BASED ON OUR EXPERIENCE AND DATA PRESENTED IN VARIOUS TECHNICAL PUBLICATIONS. IT IS THE USERS RESPONSIBILITY TO DETERMINE THE SUITABILITY OF THIS INFORMATION FOR THE ADOPTION OF SAFETY PRECAUTIONS AS MAY BE NECESSARY. THE INFORMATION CONTAINED HEREIN IS FURNISHED WITHOUT WARRANTY OF ANY KIND.