MATERIAL SAFETY DATA SHEET

This MSDS complies with OSHA'S Hazard Communication Standard 29 CFR 1910.1200 and OSHA Form 174 **IDENTITY AND MANUFACTURER'S INFORMATION** HMIS Rating: Health-1; Flammability-0; Reactivity-0; Personal Protection-B NFPA Rating: Health-1; Flammability-0; Reactivity-0; Special-DOT Hazard Classification: Non-Hazardous

Manufacturer's Name: K-CHEM, INC. P.O.Box 530632 Identity (trade name as used on label): Address: Birmingham, AL 35253 K-CHEM 500 NON-PHOSPHATE Date Prepared: 08/16/02 Prepared By: KH MSDS Number: DG46B Revision - 8 NOTICE: JUDGMENT BASED ON INDIRECT TEST DATA Information Calls: (205)592-0844 EMERGENCY RESPONSE NUMBER: 1(800)255-3924 SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION COMPONENTS-CHEMICAL NAMES AND COMMON NAMES OSHA PEL **ACGIH** LDIO Carcinogen CAS Number TLV (ppm) % MAX III LIST Ref. Source * Hazardous Components 1% or greater; Carcinogens 0.1% or greater) (ppm) 111-76-2 1.59 g/kg 25 d 2 butoxy ethanol 50 yes 5% 1310-73-2 500 mg/kg d sodium hydroxide 2 mg/m3 2 mg/m3 no 2%

1.76 g/kg sdium metasilicate 6834-92-0 2 mg/m3 2 mg/m3 d no 2%

SECTION 2 - PHYSICAL/CHEMICAL CHARACTERISTICS Specific Gravity (H2O=1): 1.07 Boiling Point: 212 F Vapor Pressure (Non-Aerosols) (mm Hg) 17 mm Vapor Pressure: PSIG @ 70°F (Aerosols): N/A Vapor Density (Air = 1): Evaporation Rate (butyl acetate=1) Solubility in Water: soluble Water Reactive: No

Appearance and Odor: Clear blue liquid/ slight butyl odor

SECTION 3 - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY as per USA FLAME PROJECTION TEST Auto Ignition Temperature Flammability Limits in Air by % in Volume: N/A % LEL: Ň/A % UEL: N/A (aerosols) N/A LASH POINT AND METHOD USED (non-aerosols): TCC na EXTINGUISHER MEDIA: not applicable

SPECIAL FIRE FIGHTING PROCEDURES: non needed

Unusual Fire & Explosion Hazards: products of combustion could contain carbon monoxide or carbon dioxide

SECTION 4 - REACTIVITY HAZARD DATA HAZARDOUS POLYMERIZATION [] WILL [X] WILL NOT OCCUR STABILITY [X]STABLE [] UNSTABLE Conditions to Avoid: None

Incompatibility (Mat. to avoid): none Hazardous Decomposition Products: not applicable

SECTION 5 - HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY: [] INHALATION [X] INGESTION [] SKIN ABSORPTION [X] EYE [] NOT HAZARDOUS

ACUTE EFFECTS

inhalation: Not considered a hazard Eye Contact: Flush with water while holding eyelid away from eye. Get Skin Contact: Wash with large amounts of water.

nedical attention immediately.

Ingestion: NO NOT INDUCE VOMITING. Get emergency medical attention. CHRONIC EFFECTS: None known

Medical Conditions Generally Aggravated by Exposure: None known

EMERGENCY FIRST AID PROCEDURES

Eye Contact: Flush with water for 15 minutes. If irritation persists, get medical attention. Skin Contact: Rinse off thoroughly with water. If irritation persists, get medical attention.

Inhalation: Remove to fresh air. If imitation persists or other symptoms develop, get medical attention.

Ingestion: DO NOT INDUCE VOMITING. Give large quantities of water followed by citrus juice or one ounce of vinegar in water. Follow with milk or olive oil. Get

immediate medical attention.

SECTION 6 - CONTROL AND PROTECTIVE MEASURES

Respiratory Protection (specify type): Not required.

Protective Gloves: Rubber, if desired.

Eye Protection: Glasses recommended. If splashing can occur wear full

face shield.

Ventilation Requirements: Use fans to insure sufficient air movement Other Protective Clothing & Equipment: Not required

Hygienic Work Practices: Wash hands and face after handling and follow instructions on label

SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps To Be Taken If Material is Spilled Or Released: Pick up spill with wet vacuum, scrub floor with water, send material to waste treatent site.

Waste Disposal Methods: Dispose of in accordance with all local, state and federal regulations.

Precautions To Be Taken In Handling & Storage: Store in original shipping containers. Keep closed when not in use. Shelf life 1 year. Protect from extreme heat and cold.

Other Precautions &/or Special Hazards: KEEP OUT OF REACH OF CHILDREN. Read & follow label directions.

We believe the statements, technical information and recommendations contained herein are reflable, but they are given without warranty or guarantee of any kind. Chemical Listed as Carcinogen or Potential Carcinogen. [a] NTP [b] IARC Monograph [c] OSHA [d] Not Listed [e] Animal Data Only