

MSDS DATE: 7/20/92
CHANGE NO.: 8745For Assistance, Contact:
Regulatory Affairs Dept.
PO Box 907 Ames, IA 50010
(800) 227-4224HACH COMPANY
PO BOX 907
AMES, IA 50010Emergency Telephone #
Rocky Mountain Poison Ctr.
(303) 623-5716**I. PRODUCT IDENTIFICATION**PRODUCT NAME: Lime Requirement Buffer 1
CAS NO.: NA CHEMICAL NAME: Not applicable
FORMULA: Not applicable CHEMICAL FAMILY: Not applicable**II. INGREDIENTS**

Magnesium Sulfate Heptahydrate
PCT: <80 CAS NO.: 7487-88-9 SARA: NOT LISTED
TLV: Not established PEL: Not established
HAZARD: Moderately toxic; may cause irritation

Triethanolamine Hydrochloride
PCT: <10 CAS NO.: 637-39-8 SARA: NOT LISTED
TLV: Not established PEL: Not established
HAZARD: Toxicity unknown; may cause irritation

Sodium Chromate
PCT: <5 CAS NO.: 7775-11-3 SARA: LISTED
TLV: 0.05 mg/M3 as Cr PEL: 0.1 mg/M3 Cr(VI)
IARC: LISTED NTP: LISTED
HAZARD: Causes severe burns; recognized carcinogen; extremely toxic

p-Nitrophenol
PCT: <5 CAS NO.: 100-02-7 SARA: LISTED
TLV: Not established PEL: Not established
HAZARD: Very toxic; causes burns

Calcium Acetate
PCT: <5 CAS NO.: 62-54-4 SARA: NOT LISTED
TLV: Not established PEL: Not established
HAZARD: Toxicity unknown; may cause irritation

Other component
PCT: <1 CAS NO.: NA SARA: NOT LISTED
TLV: Not applicable PEL: Not applicable
HAZARD: Not applicable

Any component of this mixture not specifically listed (eg. "other components") is not considered to present a carcinogen hazard.

III. PHYSICAL DATA

STATE: solid APPEARANCE: Light yellow powder ODOR: Glue-like
SOLUBILITY IN: WATER: Approx. 10% soluble ACID: Approx. 10% soluble
OTHER: Not determined BOILING POINT: NA MELTING PT.: 50C decomp.
SPEC GRAVITY: 1.67 pH: of 5% soln = 7.7 VAPOR PRESSURE: Not applicable
VAPOR DENSITY (air=1): NA EVAPORATION RATE: NA
METAL CORROSIVITY - ALUMINUM: 0.000 in/yr STEEL: 0.001 in/yr
STABILITY: Stable
STORAGE PRECAUTIONS: Store in a cool, dry place.

IV. FIRE, EXPLOSION HAZARD AND REACTIVITY DATA

FLASH PT.: Not applicable METHOD: NA
FLAMMABILITY LIMITS - LOWER: NA UPPER: NA
SUSCEPTIBILITY TO SPONTANEOUS HEATING: None
SHOCK SENSITIVITY: None AUTOIGNITION PT.: ND
EXTINGUISHING MEDIA: water, carbon dioxide, or dry chemical
FIRE/EXPLOSION HAZARDS: May emit acrid smoke and toxic fumes of sulfur oxides, nitrogen oxides, chlorides.
HAZARDOUS DECOMP. PRODUCTS: May emit acrid smoke and toxic fumes of sulfur oxides, nitrogen oxides, chlorides.
OXIDIZER: mild NFPA Codes: Health: 2 Flammability: 1 Reactivity: 0
CONDITIONS TO AVOID: Heat, flames, moisture, exposure to air, contact with oxidizable material

V. HEALTH HAZARD DATA

THIS PRODUCT MAY BE: corrosive to eyes, irritating to skin and respiratory tract.

ACUTE TOXICITY: Moderately toxic
ROUTES OF EXPOSURE: ingestion, inhalation
TARGET ORGANS: Not determined

CHRONIC TOXICITY: Not determined
ROUTES OF EXPOSURE: Not determined
TARGET ORGANS: Not determined

CANCER INFORMATION: An ingredient of this mixture is a known carcinogen.
ROUTES OF EXPOSURE: inhalation
TARGET ORGANS: lungs, paranasal sinus, nasal tissue

OVEREXPOSURE: Causes eye burns; may cause skin and respiratory tract

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

irritation.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Asthma, allergies or sensitivity to chromic acid or chromates

VI. PRECAUTIONARY MEASURES

Avoid contact with eyes, skin and clothing
Do not breathe dust.
Wash thoroughly after handling.
PROTECTIVE EQUIPMENT: fume hood, lab grade goggles, disposable gloves, lab coat

VII. FIRST AID

EYE AND SKIN CONTACT: Immediately flush eyes with water for 15 minutes. Call physician. Flush skin with plenty of water.
INGESTION: Give large quantities of water. Call physician immediately.
INHALATION: Remove to fresh air.

VIII. SPILL AND DISPOSAL PROCEDURES

IN CASE OF SPILL OR RELEASE: Scoop up material. Decontaminate site. Dispose of the material in an E.P.A. approved hazardous waste site.
DISPOSE OF IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS.

IX. TRANSPORTATION DATA

D.O.T. PROPER SHIPPING NAME: Not Currently Regulated
HAZARD CLASS: Not applicable ID: NA

I.C.A.O. PROPER SHIPPING NAME: Not Currently Regulated
HAZARD CLASS: NA ID: NA GROUP: NA

I.M.O. PROPER SHIPPING NAME: Not Currently Regulated
HAZARD CLASS: NA ID: NA GROUP: NA

X. REFERENCES

- 1) TLV's Threshold Limit Values and Biological Exposure Indices for 1988-1989. American Conference of Governmental Industrial Hygienists, 1988.
- 2) Air Contaminants, Federal Register, Vol. 54, No. 12, Thursday, January 19, 1989. pp. 2332-2983.
- 3) In-house information
- 4) Technical judgment
- 5) IARC Monographs on the Evaluation of the Carcinogenic Risks to Humans, World Health Organization (Volumes 1-42) Supplement 7, 1987, France.
- 6) Sax, N. Irving. Dangerous Properties of Industrial Materials, 6th Ed. New York: Van Nostrand Reinhold Co. 1984.

SARA: This product contains a chemical or chemicals subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

PER CALIFORNIA PROPOSITION 65: "WARNING - This product contains a chemical known to the State of California to cause cancer."