MATERIAL SAFETY DATA SHEET
Essentially Similar to U.S. Department of Labor Form OSHA—174 SEPT. 1985

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Section I — Product Information

EMERGENCY TELEPHONE: 718-338-3618
DATE PREPARED: AUGUST 7th, 1991

TELEPHONE NUMBER FOR INFORMATION: SAME AS ABOVE

TRADE NAME: HYDRION BUFFER SALTS pH 5.00 THROUGH 8.00

CHEMICAL NAME & SYNONYMS: SODIUM PHOSPHATE,DIBASIC,ANHYDROUS OR DISODIUM PHOSPHATE

CHEMICAL FAMILY: INORGANIC SALT

FORMULA: \( \text{Na}_2\text{HPO}_4 \)

CAS NUMBER: 7556-79-4

NIOSH/RETECS # WC4500000

FORMULA WEIGHT: 141.96 grams

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))

NOT APPLICABLE

OSHA PEL

NOT ESTABLISHED

ACGIH TLV

Other Limits

Recommended

% (calculated)

TXDS:
scu-rat LDLo-1000 mg/kg
im-dog LDLo-298 mg/kg

Section III — Physical/Chemical Characteristics

Boiling Point: N/A

Vapor Pressure (mm Hg): N/A

Vapor Density (A/R=1): 4.9

Solubility in Water: 11% BY WEIGHT AT 20°C

Appearance and Odor: WHITE ODORLESS GRANULAR POWDER

Specific Gravity (H₂O=1): 1.62

Melting Point: N/A

Evaporation Rate (Butyl Acetate=1): N/A
Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used)  NON FLAMMABLE

Flammable Limits  LEL N/A  UEL N/A

Extinguishing Media  USE EXTINGUISHING MEDIA APPROPRIATE FOR SURROUNDING FIRE

Special Fire Fighting Procedures

WEAR PROTECTIVE EQUIPMENT AND SELF CONTAINED BREATHING APPARATUS. MOVE EXPOSED CONTAINERS FROM FIRE AREA. USE WATER TO KEEP FIRE-EXPOSED CONTAINERS COOL.

Unusual Fire and Explosion Hazard

CLOSED CONTAINERS EXPOSED TO HEAT MAY EXPLODE. PHOSPHORUS OXIDE WILL FORM WHEN EXPOSED TO HIGH TEMPERATURES.

Section V — Reactivity Data

Stability  Unstable

Conditions to Avoid  ACIDS AND MOISTURE.

Stable

Incompatibility (Materials to Avoid)  ALKALOIDS, ANTIPYRINE, CHLORAL HYDRATE, LEAD ACETATE

Hazardous Decomposition or Byproducts:  TOXIC FUMES OF OXIDES AND PHOSPHORUS

Hazardous Polymerization  May Occur

Conditions to Avoid  NONE

Will Not Occur  WILL NOT OCCUR

Section VI — Health Hazard Data

SYMPTOMS OF OVEREXPOSURE for each potential route of exposure.

Inhaled: DUST MAY IRRITATE NOSE AND THROAT

Contact with skin or eyes: MAY CAUSE SEVERE IRRITATION AND BURNS WHEN EXPOSED TO HIGH CONCENTRATIONS.

Absorbed through skin: MAY CAUSE IRRITATION AND DERMATITIS

Swallowed: MAY RESULT IN INTESTINAL IRRITATION WITH BURNS TO THE MOUTH. INGESTION MAY CAUSE NAUSEA AND VOMITING

HEALTH EFFECTS OR RISKS FROM EXPOSURE. Explain in lay terms. Attach extra page if more space is needed.

Acute: NOT DOCUMENTED

Chronic: MAY IRRITATE EYES AND NOSE, CAN CAUSE SKIN IRRITATION AND BURNS TO EYES. MAY RESULT IN INTESTINAL IRRITATION.

Carcinogenicity: NTP? IARC Monographs? OSHA Regulated?

NOT DOCUMENTED AS A CARCINOGEN.

FIRST AID: EMERGENCY PROCEDURES

Eye Contact: FLUSH THOROUGHLY WITH COLD WATER FOR ABOUT 15 MINUTES AND GET MEDICAL ASSISTANCE.

Skin Contact: WASH WITH SOAP AND WATER. GET MEDICAL ASSISTANCE FOR PERSISTENT DERMATITIS.

Inhaled: REMOVE TO FRESH AIR. GET MEDICAL ASSISTANCE.

Swallowed: GET MEDICAL ASSISTANCE.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE MAY RESULT IN INTESTINAL IRRITATION IF SWALLOWED. MAY IRRITATE EYES, NOSE AND SKIN.
Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled
WEAR SELF CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING IF DUST CONCENTRATION IS HIGH. PLACE MATERIAL INTO CLEAN DRY CONTAINER AND REMOVE FROM AREA. FLUSH SPILL AREA WITH WATER. IF PREPARED BUFFER SOLUTION IS SPILLED- NEUTRALIZE AND MOP AND WASH AREA.

Water Disposal Method
NEUTRALIZE PREPARED BUFFER SOLUTIONS AT DISCARD AT APPROVED SITE.

NOTE: Dispose of all wastes in accordance with federal, state and local regulations.

Precautions to Be Taken in Handling and Storing
KEEP CONTAINER TIGHTLY CLOSED IN A DRY PLACE AT CONTROLLED ROOM TEMPERATURE. DO NOT GET INTO EYES, SKIN OR ON CLOTHING WASH THOROUGHLY AFTER HANDLING.

Other Precautions

VII — SPECIAL HANDLING INFORMATION

*** PERTAINS TO BULK POWDER HANDLING ***

Ventilation and engineering controls
LOCAL EXHAUST AND OR MECHANICAL (GENERAL) VENTILATION TO KEEP FUME AND DUST LEVELS A SLOW AS POSSIBLE.

Respiratory protection (type) none required where adequate ventilation exists. if airbourne dust concentration is high use appropriate niosh approved dust respirator.

Eye protection (type) SAFETY GLASSES WITH SIDE SHIELDS.

Gloves (specify material) RUBBER, NEOPRENE OR EQUIVALENT.

Other clothing and equipment FULL COVER APPROVED WORK CLOTHES

Work practices, hygienic practices DO NOT BREATHE DUST. DO NOT GET IN EYES. AVOID PROLONGED OR REPEATED SKIN CONTACT. WASH WITH COLD WATER AFTER USE. DO NOT TAKE INTERNALLY.

Other handling and storage requirements STORE AT CONTROLLED ROOM TEMPERATURES IN DRY LOCATION DEPARTMENT OF TRANSPORTATION - HAZARDOUS CLASS ORM-E UN/NA - NA 9197

Protective measures during maintenance of contaminated equipment WEAR FULL COVER CLOTHING, DUST RESPIRATOR, AND GLOVES WHEN EXPOSED TO BULK POWDER HANDLING.

** NOTE N/A = NOT APPLICABLE OR NOT AVAILABLE

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