MATERIAL SAFETY DATA SHEET

PRODUCT NAME: BUFFER X-TRA

MANUFACTURER: CUSTOM AGRICULTURAL FORMULATORS

P. O. BOX 26104 FRESNO, CA 93729

EMERGENCY PHONE NO: (559) 435-1052

I. HAZARDOUS INGREDIENTS

Isopropyl Alcohol CAS NO. 67-63-0 Phosphoric Acid CAS NO. 7664-38-2

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

ISOPROPYL PHOSPHORIC PRODUCT AS ALCOHOL ACID A WHOLE

MOLECULAR WT. 60 98
MOL. FORMULA C3H8O H3PO4

ODOR THRESHOLD 50 PPM NOT LISTED VAPOR DENSITY 2.1 (AIR =1) NOT LISTED

SOLUBILITY @20C

(G/100G WATER MISCIBLE MISCIBLE BOILING POINT 180°F 500°F

MELTING POINT -127° F 107°F

SPECIFIC GRAVITY 0.79 1.834 FLASH POINT 53°F NONE

FLASH POINT 53°F NONE 120°F METHOD TAGLIABUE NOT APPLICABLE SETAFLASH

AUTOIGNITION TEMP. 750*F NOT LISTED

III. FIRE AND EXPLOSION DATA

IN CASE OF FIRE INVOLVING THIS PRODUCT - KEEP UNNECESSARY PEOPLE AWAY.

ISOLATE AREA AND DENY ENTRY. STAY UPWIND. KEEP OUT OF LOW AREAS. DO NOT BECOME A CSUALTY.

EXTINGUISHING MEDIA: SMALL FIRES: DRY CHEMICAL, CO2, WATER SPRAY OR ALCOHOL FOAM. LARGE FIRES: WATER SPRAY, FOG OR ALCOHOL FOAM.

SPECIAL FIRE FIGHTING PROCEDURES:

DO NOT EXTINGUISH FIRE UNLESS FLOW CAN BE STOPPED. WEAR APPROPRIATE PROTECTIVE EQUIPMENT. USE WATER IN FLOODING QUANTITIES AS FOGAPPLY WATER FROM AS FAR A DISTANCE AS POSSIBLE. SOLID STREAMS OF WATER MAY BE INEFFECTIVE. COOL AFFECTED CONTAINERS WITH FLOODING QUANITIES OF WATER. CONTAIN SPILL AND RUNOFF TO AVOID ENVIRONMENTAL DAMAGE

UNUSUAL FIRE AND EXPLOSION HAZARDS:

IREMAN'S GEAR MAY BE INADEQUATE DUE TO PHOSPHORIC ACID REACTIONS WITH METALS.

MAY RELEASE HYDROGEN GAS (FLAMMABLE). INTENSE HEAT, FLAME, OR FIRE CAN CAUSE CONTAINERS TO IGNITE EXPLOSIVELY (INCLUDING EMPTY CONTAINERS)

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IV. PHYSIOLOGICAL & HEALTH EFFECTS

POTENTIAL CARCINOGEN DATA: Not listed.

CAUTION: Do not get in eyes, on skin or on clothing. Avoid breathing mist. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling.

Acute Oral LD50 (Rat): 4400 mg/kg

Acute Dermal LD50 (Rabbit): 3160 mg/kg slightly toxic

Eye Irritation FHSA 24-HR Rabbit: Corrosive Skin Irritation FHSA 24-HR Rabbit: Corrosive Skin Corrosion 4-HR DOT Rabbit: Non corrosive.

The results of the acute oral and dermal tests indicate that these concentrations of phosphoric acid are slightly toxic by ingestion in single oral doses and by single dermal applications. Following a 24-hour exposure, irreversible eye and skin damage occurred at all tested concentrations of Phosphoric Acid.

V. EMERGENCY & FIRST AID PROCEDURES

EYES: WASH EYES FOR AT LEAST 15 MINUTES. IF IRRITATION PERSISTS, SEE A PHYSICIAN. SKIN: Dermal contact is expected to be the primary route of occupational exposure to Phosphoric Acid. This product is corrosive to the eyes and skin. Phosphoric Acid may not produce an immediate burning sensation upon skin contact, delaying the awareness of the worker that contact has occurred. INHALATION: Phosphoric acid has a low vapor pressure at room temperature and is not expected to present a significant inhalation hazard under ambient conditions. Phosphoric acid can, however, be irritating to the respiratory tract if inhaled as a mist or if the material is vaporized. INGESTION: Slightly toxic.

VI. SPECIAL PROTECTIVE INFORMATION

EYE PROTECTION: To minimize eye contact, wear chemical goggles while handling this product. Have eye baths immediately available.

SKIN PROTECTION: To minimize skin contact, wear full length clothing or protective clothing, gloves and boots which are appropriate for the accompanying chemical product being mixed. RESPIRATORY PROTECTION: Avoid breathing spray mist.

VII. ENVIRONMENTAL PROTECTION

ENVIRONMENTAL IMPACT: This product, when used as directed by the label, is not expected to have any significant impact on the environment.

PŘECAUTIONS IF MATERIAL IS RELEASED OR SPILLED: Contain spill. Absorb in inert material. Place in disposable container. Flush cleaned area with water to dilue to a harmless solution. Neutralize cautiously with a base such as soda ash.

WASTE DISPOSAL METHODS: Dispose of waste materials and containers according to local, state and federal regulations.

VIII. SPECIAL PRECAUTIONS

READ AND OBSERVE ALL PRECAUTIONS ON THE PRODUCT LABEL. KEEP PRODUCT IN ORIGINAL CONTAINER.