

MATERIAL SAFETY DATA SHEET

BUFFER-TEN

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Issue Date: 05/07

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Chemical Product

BUFFER-TEN

CA Reg. No. 17545-50016

Common Name: Liquid acidulator/buffer.

Chemical Description: Liquid mixture of phosphoric acid and surfactants.

TSCA/CAS No.: This product is a mixture — there is no specific CAS number.

Manufactured For

Monterey AgResources

P. O. Box 35000

Fresno, CA 93745

Emergency Phone Numbers

Emergency Telephone: DAYS: (559) 499-2100 EVES: (559) 994-9144

CHEMTREC (24-Hour Emergency Number): (800) 424-9300

EPA National Response Center: (800) 424-8802

SECTION 2. HAZARDOUS INGREDIENTS

| CHEMICAL | CAS NO. | % | TLV OR PEL | RQ (lbs) |
|-----------------|-----------|------|---|----------|
| Phosphoric acid | 7664-38-2 | 10.0 | 1 mg/m ³ (ACGIH TWA) 5 mg/m ³ (ACGIH STEL) 1 mg/m ³ (OSHA PEL) | 5,000 |

SECTION 3. EMERGENCY/HAZARDS OVERVIEW

Dark, blue liquid with slight non-distinct odor. Avoid mixing with strong acids, bases or oxidizers. Contain any liquid runoff. D.O.T. corrosive liquid.

HEALTH: 2 REACTIVITY: 0 FLAMMABILITY: 0 ENVIRONMENT: 0
(0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Extreme)

SECTION 4. FIRST AID

- Eyes: Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Call a Poison Control Center or doctor for treatment advice.
- Skin: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a Poison Control Center or doctor for treatment advice.
- Ingestion: If conscious and alert, give 2 glasses of water to drink for dilution. Contact physician or Poison Control Center. Never give anything by mouth to an unconscious person.
- Inhalation: Move to fresh air. If breathing becomes difficult, call a physician.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

SECTION 5. FIRE AND EXPLOSION HAZARDS

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| Flash Point: | > 200°F |
| Test Method: | Tag Closed Cup. |
| LEL Flammable Limits: | Not pertinent. |
| UEL Flammable Limits: | Not pertinent. |
| Autoignition Temperature: | Not pertinent. |
| Flammability Classification: | Noncombustible. |
| Known Hazardous Products of Combustion: | None. |
| Properties that Initiate/Contribute to Intensity of Fire: | None. |
| Potential For Dust Explosion: | None. |
| Reactions that Release Flammable Gases or Vapors: | Not known. |
| Potential For Release of Flammable Vapors: | None. |
| Unusual Fire & Explosion Hazards: | None. |
| Extinguishing Media: | Dry powder or CO ₂ . |
| Special Firefighting Procedures: | Wear positive pressure, self-contained breathing apparatus and goggles. Avoid smoke inhalation. Contain any liquid runoff. |

SECTION 6. SPILLS AND LEAKS

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| Containment: | Prevent product spillage from entering drinking water supplies or streams. |
| Clean Up: | Collect liquid or absorb onto absorbent material and package for disposal. |
| Evacuation: | Not necessary. |

SECTION 7. STORAGE AND HANDLING

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| Storage: | Store in plastic or stainless steel container in a cool, well-ventilated, dry place at temperatures above 40°F. Do not store in contact with alkaline materials. Do not store near food or feeds. Do not stack pallets more than two (2) high. |
| Transfer Equipment: | Transfer product using chemical-resistant plastic or stainless steel tanks, pumps, valves, etc. |
| Work/Hygienic Practices: | Keep out of reach of children. Avoid contact with eyes, skin and clothing. Avoid inhalation of spray mists. Wash thoroughly with water after handling. |

SECTION 8. PERSONAL PROTECTIVE EQUIPMENT

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| Eyes: | Chemical dust/splash goggles or full-face shield to prevent eye contact. As a general rule, do not wear contact lenses when handling. |
| Skin: | Coveralls worn over long sleeved shirt and long pants, socks and chemical resistant footwear, apron and gloves made of any waterproof material. |
| Respiratory: | Not normally needed. Atmospheric levels should be maintained below the exposure guidelines (see Section 2). If use generates an aerosol mist or respiratory irritation, use NIOSH-approved dust/mist respirator (such as 3M #8710). |
| Ventilation: | Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines. |

SECTION 9. PHYSICAL AND CHEMICAL DATA

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| Appearance: | Dark, blue liquid. |
| Odor: | Slight non-distinct odor. |
| pH: | 1.0 – 2.0 |
| Vapor Pressure: | 0.25 psi |
| Vapor Density (Air = 1): | > 1.0 |
| Boiling Point: | 210°C (410°F) |
| Freezing Point: | Not available. |
| Water Solubility: | Miscible. |
| Density: | 8.8 – 9.0 lbs./gal. |
| Evaporation Rate: | Not available. |
| Viscosity: | Not available. |
| % Volatile: | Not available. |
| Octanol/Water Partition Coefficient: | Not available. |
| Saturated Vapor Concentration: | Not available. |

SECTION 10. STABILITY AND REACTIVITY

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| Stability: | Stable. |
| Conditions To Avoid: | Exposure to flames or high heat. |
| Incompatibility: | Contact with alkaline materials. |
| Hazardous Decomposition Products: | None. |
| Hazardous Polymerization: | Will not occur. |

SECTION 11. POTENTIAL HEALTH EFFECTSAcute Effects:

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| Eyes: | Corrosive. May cause redness, burning, and corneal injury. |
| Skin: | Mild irritant. May cause redness, drying and cracking. The dermal LD ₅₀ for rats is > 2,000 mg/kg. |
| Ingestion: | No to low toxicity if swallowed. The oral LD ₅₀ for rats is > 5,000 mg/kg. |
| Inhalation: | Vapors may irritate respiratory system. |

Subchronic Effects: None known.

Chronic Effects: None known.

SECTION 12. ECOLOGICAL INFORMATION

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| Algal/Lemna Growth Inhibition: | Not known. |
| Toxicity to Fish and Invertebrates: | Not known. |
| Toxicity to Plants: | Not known. |
| Toxicity in Birds: | Not known. |

SECTION 13. DISPOSAL

Do not contaminate lakes, streams, ponds, estuaries, oceans or other waters by discharge of waste effluents or equipment washwaters. Dispose of waste effluents according to state and local regulations. Also, chemical additions or other alterations of this product may invalidate any disposal information in this MSDS. Therefore, consult local waste regulators for proper disposal. Do not discharge.

SECTION 14. TRANSPORTATION

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| D.O.T. Shipping Description: | Corrosive Liquid, N.O.S. (Phosphoric Acid), 8, UN 1760, PG III. ERG #154. |
| Other Shipping Information: | Adhesives, Adjuvants, Spreaders or Stickers, Liquid. NMFC Item 4612, LTL Class 60 |

SECTION 15. REGULATORY INFORMATION

CERCLA: Phosphoric acid is listed as a priority pollutant under the Clean Water Act and, as such, falls under the CERCLA spill reporting requirements of 40 CFR 302.

SARA TITLE III, Section 313 Toxic Chemicals: Phosphoric acid (10.0%).

PROPOSITION 65: None.

SECTION 16. OTHER

While the information contained herein is based on data considered accurate and was compiled to comply with the Federal Hazard Communication Standard and the California Hazardous Substances Information and Training Act, it is provided for guidance only. Monterey AgResources does not guarantee its accuracy or completeness. Health and safety precautions in this data sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations; in so doing, user assumes all risk in use of the material. The information contained herein is not to be taken as a warranty or representation for which Monterey AgResources assumes legal responsibility.