



Safety Data Sheet

Report Date 01-Jul-15

Page 1 of 4

1. Identification

Product Name : BUFFER PS
Synonyms : None
Product Use : Buffering/Conditioning Agent for Pesticide Sprays
Manufacturer/Supplier : Helena Chemical Company
Address : 225 Schilling Blvd. Collierville, TN 38017
General Information : 901-761-0050
Transportation Emergency Number : CHEMTREC:800-424-9300

2. Hazard Identification



Signal Word : Warning
Skin Irritation : Slightly irritating (score 0.92)
Eye Irritation : Severely irritating
Acute Toxicity Oral : LD50 (rat) >5,010 mg/kg
Acute Toxicity Dermal : LD50 (rat) >2,010 mg/kg

Hazard Categories : Eye/Skin Irritation-2A/3; Skin Sensitization-1B; Dermal Toxicity-4; Oral/Inhalation Toxicity-5/5

Hazard Statement : Causes serious eye irritation
Harmful in contact with skin
May cause an allergic skin reaction
Causes mild skin irritation
May be harmful if swallowed
May be harmful if inhaled

3. Composition / Information on Ingredients

Component	CAS Number	Weight %
Alkyl Aryl Polyethoxy Ethanol Phosphates and Organic Phosphatic Acids	Proprietary	30.00
Components ineffective as a buffer or conditioner	Proprietary	70.00

4. First Aid Measures

Eye : Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Skin : Take off contaminated clothing. Rinse skin with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

Inhalation : Move person to fresh air. If not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

Ingestion : Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth if unconscious.

Indication of Immediate Medical Attention and Special Treatment Needed : In the event of an adverse response, treatment should be directed toward control of the symptoms.



Safety Data Sheet

Report Date 01-Jul-15

Page 2 of 4

5. Fire Fighting Measures

- Extinguishing Media** : Use water, alcohol foam, dry chemical and carbon dioxide extinguishing agents.
- Specific Hazards Arising from the Chemical** : May produce carbon monoxide, carbon dioxide and oxides of phosphorus under fire conditions.
- Special Fire Fight Proc** : Wear self-contained breathing apparatus and full protective clothing.

6. Accidental Release Measures

- Personal Precautions** : Keep unprotected and unnecessary personnel out of spill area.
- Protective Equipment** : Splashproof goggles or face shield, impervious gloves, impervious apron and footwear. Eyewash station and emergency shower should be available in work area. Use NIOSH-approved respirator with organic vapor cartridge if needed.
- Emergency Procedures** : Dike spill to prevent spreading to soil. Prevent entry into any waterways, drains or sewers.
- Methods and Materials for Containment and Cleanup** : Cover spill with an inert absorbent, such as clay, sand or sawdust. Collect and place in suitable containers for proper disposal. Flush spill area with water, absorb, collect and place in containers with other material for disposal.

7. Handling and Storage

- Precautions for Safe Handling** : Keep out of reach of children and animals. Do not contaminate water supplies, lakes, streams, ponds or drains with this product.
- Conditions for Safe Storage** : Store in original container only. Keep container tightly closed. Do not allow water to be introduced into the contents of the container. Do not store near heat or open flame. Do not store with oxidizing agents or ammonium nitrate.

8. Exposure Controls / Personal Protection

- TLV/PEL** : No information found for this mixture.
- Appropriate Engineering Controls** : Local mechanical exhaust ventilation.
- Personal Protective Equipment** : Splashproof goggles or face shield, impervious gloves, impervious apron and footwear. Eyewash station and emergency shower should be available in work area. Use NIOSH-approved respirator with organic vapor cartridge if needed.

9. Physical and Chemical Properties

- Odor/Appearance** : Clear slightly yellow liquid; surfactant odor.
- Flash Point, °F** : >200 Degrees F.
- Boiling Point, °F** : >200 Degrees F.
- Melting Point(Freezing point), °C** : No information found
- Vapor Pressure, mm Hg @ 20 °C** : No information found
- Vapor Density** : No information found
- Solubility in Water** : Completely
- Molecular Formula** : Not applicable, formulated mixture.
- Density, g/mL @ 25 °C** : 1.047-1.067
- Evaporation Rate(Butyl Acetate = 1)** : No information found
- Octanol/Water Partition Coefficient** : No information found



Safety Data Sheet

Report Date 01-Jul-15

Page 3 of 4

pH : 1.9-2.5
Flammable Limits (approximate volume % in air) : No information found
Auto-ignition Temperature : Not applicable
Decomposition temperature : No information found

10. Stability and Reactivity

Reactivity : No information found
Chemical Stability : Stable
Hazardous Decomposition Products : May produce carbon monoxide, carbon dioxide and oxides of phosphorus under fire conditions.
Hazardous Polymerization : Will not occur
Conditions to Avoid : Do not mix with alkaline materials and strong oxidizers.
Incompatible Materials : Do not mix with alkaline materials and strong oxidizers.

11. Toxicological Information

Acute Toxicity (Oral LD50) : >5,010 mg/kg (rat). May be harmful if swallowed.
Acute Toxicity (Dermal LD50) : >2,010 mg/kg (rat). May be harmful in contact with skin.
Acute Toxicity Inhalation LC50 : No specific data found. Mild irritant at high concentrations. May be harmful if inhaled.
Likely Routes of Exposure : Skin, eyes, inhalation
Skin Irritation : Slightly irritating (score .92). Causes mild skin irritation.
Eye Irritation : Severely irritating. Causes serious eye irritation.
Skin Sensitization : Skin sensitizer - May cause an allergic skin reaction.
Carcinogenic : Not listed by IARC, NTP or OSHA.
Chronic Effects : Repeated skin contact may cause a persistent irritation or dermatitis.
Other Hazards : CA Prop 65: This product contains chemicals known to the state of California to cause cancer and birth defects or other reproductive harm (residual ethylene oxide).

12. Ecological Information

Ecotoxicity : No information found
Persistence and Degradability : No information found
Bioaccumulative Potential : No information found
Mobility in Soil : No information found
Other Adverse Effects : Do not contaminate water supplies, lakes, streams, ponds or drains.

13. Disposal Considerations

Waste Disposal Method : This material must be disposed of according to Federal, State or Local procedures under the Resource Conservation and Recovery Act. Regulated as D002 RCRA hazardous waste due to low pH.

14. Transport Information

UN Proper Shipping Name : Corrosive Liquid, n.o.s. (Phosphoric Acid)
Transport Hazard Class : Class 8 (Corrosive)
UN Identification Number : UN1760



Safety Data Sheet

Report Date **01-Jul-15**

Page 4 of 4

Packaging Group : PG III
Environmental Hazards : No information found
Transport in Bulk : No information found
Special Precautions for Transportation : Regulated by all modes of transportation
Freight Classification : Adhesives, Adjuvants, Spreaders or Stickers, N.O.I. (NMFC Item 42652, Class 60)

15. Regulatory Information

National Fire Protection Association Rating :

Health: 2 Fire: 1 Reactivity: 0
Rating Level: (4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Minimum)

S.A.R.A Title III Hazard Classification (Yes/No) :

Immediate(Acute) Health: Y
Delayed (Chronic) Health: Y
Sudden Release of Pressure: N
Fire: N
Reactive: N

16. Other Information

Data of Preparation/Revision : 01-July-2015