

## Buffer pH 4.0, Red

## Material Safety Data Sheet

## Section 1. Product and Company Identification

Product Name Buffer pH 4.0, Red

Product Code 34170-155

Manufacturer EMD Chemicals Inc.

Effective Date 3/4/2003

P.O. Box 70

480 Democrat Road

Gibbstown, NJ 08027

Prior to January 1, 2003 EMD Chemicals Inc. was

EM Industries, Inc. or EM Science, Division of

EM Industries, Inc.

## For More Information Call

856-423-6300 Technical Service

Monday-Friday: 8:00 AM - 5:00 PM

## In Case of Emergency Call

800-424-9300 CHEMTREC

(USA)

613-996-6666 CANUTEC

(Canada)

24 Hours/Day: 7 Days/Week

Synonym None.

Material Uses Laboratory Reagent

Chemical Solution.

Family

## + Section 2. Composition and Information on Ingredients

## Component

CAS #	% by Weight
877-24-7	0-1
915-67-3	0-1
7732-18-5	98-99
132-27-4	0.05

Potassium Hydrogen Phthalate

AMARANTH

WATER

Dowacide A

## + Section 3. Hazards Identification

Physical State and Liquid.

Appearance

Emergency CAUTION !

Overview MAY BE HARMFUL IF INHALED OR SWALLOWED.

MAY CAUSE EYE AND SKIN IRRITATION.

WARNING: This product contains a chemical(s) known to the State of California to cause cancer.

Routes of Entry Ingestion.

Potential Acute Health

Effects

Eyes May be hazardous in case of eye contact (irritant).

Skin May be hazardous in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Inhalation May be hazardous in case of inhalation.

Ingestion May be hazardous in case of ingestion.

## Potential Chronic Health Effects

Carcinogenic This material is not known to cause cancer in animals or humans.

Effects

Additional information See Toxicological Information (section 11)

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**Medical Conditions** Repeated or prolonged exposure is not known to aggravate medical  
**Aggravated by** condition.  
**Overexposure:**

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#### **Section 4. First Aid Measures**

**Eye Contact** Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

**Skin Contact** In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

**Inhalation** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Ingestion** Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

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#### **Section 5. Fire Fighting Measures**

**Flammability of the** Non-flammable.

**Product**

**Auto-ignition** Not applicable.

**Temperature**

**Flash Points** Not applicable.

**Flammable Limits** Not applicable.

**Products of** Not applicable.

**Combustion**

**Fire Hazards in** Not applicable.

**Presence of Various**

**Substances**

**Explosion Hazards** Risks of explosion of the product in presence of static discharge: No.  
**in Presence of**

**Various Substances** Risks of explosion of the product in presence of mechanical impact:  
No.

**Fire Fighting Media** Not applicable.

**and Instructions**

**Protective Clothing** Not applicable.

**(Fire)**

**Special Remarks on** Not available.

**Fire Hazards**

**Special Remarks on** Not available.

**Explosion Hazards**

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#### **Section 6. Accidental Release Measures**

**Small Spill and** Absorb with an inert material and put the spilled material in an appropriate  
**Leak** waste disposal. If necessary: **Neutralize the residue with a dilute solution of sodium carbonate.**

**Large Spill and** Absorb with an inert material and put the spilled material in an appropriate  
**Leak** waste disposal. **Neutralize the residue with a dilute solution of sodium**

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carbonate.

**Spill Kit  
Information**

No specific spill kit required for this product.

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**Section 7. Handling and Storage**

**Handling**

Avoid contact with eyes, skin and clothing. Do not ingest. Avoid breathing vapors or spray mists. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

**Storage**

Keep container tightly closed. Keep container in a cool, well-ventilated area.

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**Section 8. Exposure Controls/Personal Protection**

**Engineering  
Controls**

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are proximal to the work-station location.

**Personal Protection**

Eyes Splash goggles.

Body Lab coat.

Respiratory Vapor respirator. Be sure to use an approved/certified respirator or equivalent.

Hands Gloves.

Feet Not applicable.

**Protective Clothing  
(Pictograms)**

**Personal Protection** Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A

**in Case of a Large Spill** self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Product Name**

**Exposure Limits**

Potassium Hydrogen Phthalate

Not available.

AMARANTH

Not available.

WATER

Not available.

Dowacide A

Not available.

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**Section 9. Physical and Chemical Properties**

**Odor**

Odorless.

**Color**

Clear. Red.

**Physical State and  
Appearance**

Liquid.

**Molecular Weight**

Not applicable.

**Molecular Formula**

Not applicable.

**pH**

4 [Acidic.]

**Boiling/Condensation Point** The lowest known value is 99.9°C (211.8°F) (Water).

**Point**

**Melting/Freezing  
Point**

May start to solidify at -0.1°C (31.8°F) based on data for: Water.

**Specific Gravity**

Not available.

**Vapor Pressure**

Not available.

**Vapor Density**

Not available.



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Odor Threshold	Not available.
Evaporation Rate	0.36 (Water) compared to (n-BUTYL ACETATE=1)
LogKow	Not available.
Solubility	Very slightly soluble in water.

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#### Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Conditions of Instability	Not available.
Incompatibility with Various Substances	Not available.
Rem/Incompatibility	Not available.
Hazardous Decomposition Products	COx
Hazardous Polymerization	Will not occur.

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#### + Section 11. Toxicological Information

RTECS Number:	Potassium Hydrogen Phthalate	CZ4326000
	Amaranth	QJ6550000
	Water	ZC0110000
	Dowicide A	DV7700000
Toxicity	LD50: Not available.	
	LC50: Not available.	
Chronic Effects on Humans	Not available.	
Acute Effects on Humans	May be hazardous in case of eye contact (irritant). May be hazardous in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering. May be hazardous in case of inhalation.	
Synergetic Products (Toxicologically)	Not available.	
Irritancy	Draize Test: Not available.	
Sensitization	Not available.	
Carcinogenic Effects	This material is not known to cause cancer in animals or humans.	
Toxicity to Reproductive System	Not available.	
Teratogenic Effects	Not available.	
Mutagenic Effects	Not available.	

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#### Section 12. Ecological Information

Ecotoxicity	Not available.
BOD5 and COD	Not available.
Toxicity of the Products of	The products of degradation are less toxic than the product itself.

**Biodegradation****Section 13. Disposal Considerations**

<b>EPA Waste Number</b>	Not available.
<b>Treatment</b>	Material does not have an EPA Waste number and is not a listed waste, however consultation with a permitted waste disposal site (TSD) should be accomplished. ALWAYS CONTACT A PERMITTED WASTE DISPOSER (TSD) TO ASSURE COMPLIANCE WITH ALL CURRENT LOCAL, STATE AND FEDERAL REGULATIONS.

**Section 14. Transport Information**

<b>DOT Classification</b>	Not available.
<b>TDG Classification</b>	Not available.
<b>IMO/IMDG Classification</b>	Not available.
<b>ICAO/IATA Classification</b>	Not available.

**Section 15. Regulatory Information**

<b>U.S. Federal Regulations</b>	TSCA 8(b) inventory: Potassium Hydrogen Phthalate; AMARANTH; Water; Dowacide A SARA 302/304/311/312 extremely hazardous substances: No products were found. SARA 302/304 emergency planning and notification: No products were found. SARA 302/304/311/312 hazardous chemicals: AMARANTH; Dowacide A SARA 311/312 MSDS distribution – chemical inventory – hazard identification: AMARANTH: Delayed (Chronic) Health Hazard; Dowacide A: Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard Clean Water Act (CWA) 307: No products were found. Clean Water Act (CWA) 311: No products were found. Clean air act (CAA) 112 accidental release prevention: No products were found. Clean air act (CAA) 112 regulated flammable substances: No products were found. Clean air act (CAA) 112 regulated toxic substances: No products were found.
<b>WHMIS (Canada)</b>	Not controlled under WHMIS (Canada). CEPA DSL: Potassium Hydrogen Phthalate; AMARANTH; Water; Dowacide A This product has been classified in accordance with the hazard criteria of the Controlled Product Regulations and the MSDS contains all required information.
<b>International Regulations</b>	
<b>EINECS</b>	Potassium Hydrogen Phthalate 212-889-4 AMARANTH 213-022-2 Water 231-791-2

## Buffer pH 4.0, Red

<b>DSCL (EEC)</b> <b>International</b> <b>Lists</b>	<p>Dowacide A 205-055-6</p> <p>This product is not classified according to the EU regulations.</p> <p>Australia (NICNAS): Potassium Hydrogen Phthalate; AMARANTH; Water; Dowacide A</p> <p>Japan (MITI): Potassium Hydrogen Phthalate; AMARANTH; Water; Dowacide A</p> <p>Japan (MOL): Dowacide A</p> <p>Korea (TCCL): Potassium Hydrogen Phthalate; Water; Dowacide A</p>
<b>State Regulations</b>	<p>Philippines (RA6969): Potassium Hydrogen Phthalate; AMARANTH; Water; Dowacide A</p> <p>China: No products were found.</p> <p>Massachusetts RTK: Dowacide A</p> <p>New Jersey: Buffer pH 4.0, Red</p> <p>California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: AMARANTH; Dowacide A</p> <p>California prop. 65 (no significant risk level): AMARANTH; Dowacide A</p> <p>California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: AMARANTH; Dowacide A</p>

### Section 16. Other Information

<b>National Fire</b> <b>Protection</b> <b>Association</b> <b>(U.S.A.)</b>	<p><b>0</b> <b>Fire</b></p> <p><b>20</b> <b>Hazard</b></p> <p><b>Health</b></p> <p><b>Reactivity</b></p> <p><b>Specific</b> <b>Hazard</b></p>
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Changed Since Last  
Revision +

#### Notice to Reader

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