

Buffer pH 4.00, Clear

Material Safety Data Sheet

Section 1. Product and Company Identification

Product Name Buffer pH 4.00, Clear

Product Code 34170-136

Manufacturer EMD Chemicals Inc.

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.

Effective Date 3/4/2003

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 Family Solution.

+ Section 2. Composition and Information on Ingredients

Component	CAS #	% by Weight
Potassium Hydrogen Phthalate	877-24-7	1-1.5
Dowicide A	132-27-4	
Water	7732-18-5	98-99

Section 3. Hazards Identification

Physical State and Appearance Liquid.

Emergency Overview CAUTION !

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

Effects

Additional information See Toxicological Information (section 11)

Medical Conditions Repeated or prolonged exposure is not known to aggravate medical

Aggravated by condition.
Overexposure:

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. Cold water may be used. 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.

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

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

Fire Fighting Media and Instructions Not applicable.

Protective Clothing (Fire) Not applicable.

Special Remarks on Not available.

Fire Hazards

Special Remarks on Not available.

Explosion Hazards

Section 6. Accidental Release Measures

Small Spill and Leak Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. If necessary: **Neutralize the residue with a dilute solution of sodium carbonate.**

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

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Spill Kit Information No specific spill kit required for this product.

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.

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 in Case of a Large Spill Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A 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.
Dowicide A	Not available.
Water	Not available.

Section 9. Physical and Chemical Properties

Odor Odorless.

Color Clear. Colorless.

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.

Point

Specific Gravity Not available.

Vapor Pressure Not available.

Vapor Density Not available.

Odor Threshold Not available.

Evaporation Rate 0.36 (Water) compared to (n-BUTYL ACETATE=1)

LogKow	Not available.
Solubility	Soluble in water.

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	Will not occur.
Hazardous Polymerization	

Section 11. Toxicological Information**RTECS Number:**

Potassium Hydrogen Phthalate	CZ4326000
Water	ZC0110000
Dowicide A	DV7700000

Toxicity	Acute oral toxicity (LD50): 188298 mg/kg (Rat) (Calculated value for the mixture).
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. May be hazardous in case of ingestion.
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.

Section 12. Ecological Information

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

Section 13. Disposal Considerations

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EPA Waste Number Treatment Not available.
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. ALWAYS CONTACT PERMITTED WASTE DISPOSER (TSD) TO ASSURE COMPLIANCE WITH ALL CURRENT LOCAL, STATE AND FEDERAL REGULATIONS.

Section 14. Transport Information

DOT Classification Not available.
TDG Classification Not available.
IMO/IMDG Classification Not available.
ICAO/IATA Classification Not available.

Section 15. Regulatory Information

U.S. Federal Regulations TSCA 8(b) inventory: Potassium Hydrogen Phthalate; 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: Dowacide A
SARA 311/312 MSDS distribution – chemical inventory – hazard identification: 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.

WHMIS (Canada) Not controlled under WHMIS (Canada).
CEPA DSL: Potassium Hydrogen Phthalate; 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.

International Regulations
EINECS Potassium Hydrogen Phthalate 212–889–4
WATER 231–791–2
Dowacide A 205–055–6

DSCL (EEC) International This product is not classified according to the EU regulations.
Australia (NICNAS): Potassium Hydrogen Phthalate; Water; Dowacide A

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Lists

Japan (MITI): Potassium Hydrogen Phthalate; Water; Dowicide A

Japan (MOL): Dowicide A

Korea (TCCL): Potassium Hydrogen Phthalate; Water; Dowicide A

Philippines (RA6969): Potassium Hydrogen Phthalate; Water; Dowicide A

China: No products were found.

State Regulations

Massachusetts RTK: Dowicide A

New Jersey: Buffer pH 4.00, Clear

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: Dowicide A

California prop. 65 (no significant risk level): Dowicide A

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: Dowicide A

Section 16. Other Information

National Fire Protection Association (U.S.A.)	0	Fire
	10	Hazard
	Health	Reactivity
		Specific Hazard

Changed Since Last Revision ⁺

Notice to Reader

The statements contained herein are based upon technical data that EMD Chemicals Inc. believes to be reliable, are offered for information purposes only and as a guide to the appropriate precautionary and emergency handling of the material by a properly trained person having the necessary technical skills. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use, storage and disposal of these materials and the safety and health of employees and customers and the protection of the environment. EMD CHEMICALS INC. MAKES NO REPRESENTATION OR WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE, WITH RESPECT TO THE INFORMATION HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS.
