



ELECTRO-CHEMICAL DEVICES

Liquid Analytical Instrumentation for Process Control

*Bringing Simplicity
to a Solution*

Material Safety Data Sheet

Buffer Solution (Biphthalate), pH 4

Manufacture By:

Electrochemical Devices, Inc.

1681 Kettering

Irvine, CA 92614

Phone: (800) 729-1333

1. Product Identification

Synonyms: None

CAS No.: 877-24-7

Molecular Weight: Not applicable to mixtures.

Chemical Formula: HOOC-C₆H₄COOK

Product Codes:

ECD 2010100

2. Hazards Identification

Emergency Overview

CAUTION! MAY CAUSE IRRITATION TO SKIN AND EYES.

SAF-T-DATA^(tm) Ratings (Provided here for your convenience)

Health Rating: 1 - Slight

Flammability Rating: 0 - None

Reactivity Rating: 0 - None

Contact Rating: 2 - Moderate

Lab Protective Equip: GOGGLES; LAB COAT; PROPER GLOVES

Storage Color Code: Green (General Storage)

Potential Health Effects



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Information on the human health effects from exposure to this substance is limited.

Inhalation:

Not expected to be an inhalation hazard. May cause irritation to respiratory tract because of the slight acidity. Symptoms may include coughing and sore throat.

Ingestion:

Large doses may produce nausea, vomiting, and abnormal sensations in hands and feet. Because of slight acidity, causes irritation to the mucous membranes.

Skin Contact:

Contact may cause irritation, with redness and pain.

Eye Contact:

May cause eye irritation.

Chronic Exposure:

No information found.

Aggravation of Pre-existing Conditions:

No information found.



HMIS rating (Scale 0-4):

3. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
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Potassium Acid Phthalate	877-24-7	1 - 2%	Yes
Water	7732-18-5	98 - 99%	No



4. First Aid Measures

Inhalation:

Remove to fresh air. Get medical attention for any breathing difficulty.

Ingestion:

If large amounts were swallowed, give water to drink and get medical advice.

Skin Contact:

Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation develops.

Eye Contact:

Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists.

5. Fire Fighting Measures

Fire:

Not expected to be a fire hazard.

Explosion:

No information found.

Fire Extinguishing Media:

Use any means suitable for extinguishing surrounding fire.

Special Information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Contain and recover liquid when possible. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust.

7. Handling and Storage



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Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

None established.

Ventilation System:

In general, dilution ventilation is a satisfactory health hazard control for this substance. However, if conditions of use create discomfort to the worker, a local exhaust system should be considered.

Personal Respirators (NIOSH Approved):

Not expected to require personal respirator usage.

Skin Protection:

Wear protective gloves and clean body-covering clothing.

Eye Protection:

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance:

Clear, colorless liquid.

Odor:

Odorless.

Solubility:

Complete (100%)

Specific Gravity:

No information found.

pH:

4

% Volatiles by volume @ 21C (70F):

ca. 99

Boiling Point:

No information found.

Melting Point:

No information found.

Vapor Density (Air=1):

Not applicable.

**Vapor Pressure (mm Hg):**

Not applicable.

Evaporation Rate (BuAc=1):

No information found.

10. Stability and Reactivity

Stability:

Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:

Carbon dioxide and carbon monoxide may form when heated to decomposition.

Hazardous Polymerization:

Will not occur.

Incompatibilities:

Nitric Acid. Strong oxidizing agents.

Conditions to Avoid:

Heat, ignition sources and incompatibilities.

11. Toxicological Information

No LD50/LC50 information found relating to normal routes of occupational exposure.

-----\Cancer Lists\-----

---NTP Carcinogen---

Ingredient	Known	Anticipated	IARC Category
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Potassium Acid Phthalate (877-24-7)	No	No	None
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Water (7732-18-5)	No	No	None
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12. Ecological Information

Environmental Fate:

No information found.



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Environmental Toxicity:

No information found.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Not regulated.

15. Regulatory Information

-----\Chemical Inventory Status - Part 1\-----

Ingredient	TSCA	EC	Japan	Australia
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Potassium Acid Phthalate (877-24-7)	Yes	Yes	Yes	Yes
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Water (7732-18-5)	Yes	Yes	Yes	Yes
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-----\Chemical Inventory Status - Part 2\-----

--Canada--

Ingredient	Korea	DSL	NDSL	Phil.
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Potassium Acid Phthalate (877-24-7)	Yes	Yes	No	Yes
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Water (7732-18-5)	Yes	Yes	No	Yes
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-----\Federal, State & International Regulations - Part 1\-----

-SARA 302- -----SARA 313-----

Ingredient	RQ	TPQ	List	Chemical Catg.
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Potassium Acid Phthalate (877-24-7)	No	No	No	No
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Water (7732-18-5)	No	No	No	No
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-----\Federal, State & International Regulations - Part 2\-----

-RCRA- -TSCA-

Ingredient	CERCLA	261.33	8(d)
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Potassium Acid Phthalate (877-24-7)	No	No	No
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Water (7732-18-5)	No	No	No
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Chemical Weapons Convention: No TSCA 12(b): No CDTA: No

SARA 311/312: Acute: Yes Chronic: No Fire: No Pressure: No

Reactivity: No (Mixture / Liquid)

Australian Hazchem Code: None allocated.

Poison Schedule: None allocated.

WHMIS:

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

16. Other Information



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NFPA Ratings:

Health: **1**

Flammability: **0**

Reactivity: **0**

Label Hazard Warning:

CAUTION! MAY CAUSE IRRITATION TO SKIN AND EYES.

Label Precautions:

Avoid contact with eyes, skin and clothing.

Keep container closed.

Wash thoroughly after handling.

Label First Aid:

In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists.

Product Use:

Laboratory Reagent.

Revision Information:

MSDS 2010100 rev. b June, 2009

Disclaimer:
