



## Material Safety Data Sheet

Buffersolutions,pH3.00,4.00,and5.00,CarbonStandards(organic),PotassiumHydrogen  
Phthalate Solutions

### Section 1 - Chemical Product and Company Identification

**MSDS Name:**

Buffer solutions, pH 3.00, 4.00, and 5.00, Carbon Standards(organic),PotassiumHydrogenPhthalate  
Solutions

**Catalog Numbers:**

LC12250,LC12270,LC12280,LC12300,LC12910, LC13240, LC13245, LC18700

**Synonyms:**

Acidphthalatebuffers,potassiumbiphthalatebuffers,potassiumdihydrogenphthalatebuffers,  
neutralized phthalate buffers, potassium acid phthalate, carbon standards (organic).

**Company Identification:**

LabChem,Inc.  
200 William Pitt Way  
Pittsburgh, PA 15238

**Company Phone Number:**

(412) 826-5230

**Emergency Phone Number:**

(800) 424-9300

**CHEMTREC Phone Number:**

(800) 424-9300

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
7732-18-5	Water	balance
877-24-7	Potassium hydrogen phthalate	>1
50-00-0	Formaldehyde	0.04
7647-01-0	Hydrogen chloride	0-0.1
1310-73-2	Sodium hydroxide	0-0.1

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

*Appearance: Colorless-maybecolorcoded(dye)accordingtopH*

*Caution! May cause eye and skin irritation.*

*Target Organs: Noneknown.*

#### Potential Health Effects



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**Eye:**

Maycauseeyeirritation.

**Skin:**

Maycauseskinirritation.

**Ingestion:**

Causesgastrointestinalirritationwithnausea,vomitinganddiarrhea.

**Inhalation:**

Maycauserespiratorytractirritation.

**Chronic:**

Maycausedermatitisandconjunctivitis.

## Section 4 - First Aid Measures

**Eyes:**

Flusheyeswithplentyofwaterforatleast15minutes,occasionallyliftingtheupperandlowerlidsuntilnoevidence of chemical remains. Get medical aid at once.

**Skin:**

Getmedicalaid.Immediatelyflushskinwithplentyofsoapandwaterforatleast15minuteswhileremoving contaminated clothing and shoes. Remove contaminated clothing and shoes.

**Ingestion:**

Giveconsciousvictim2-4cupfulsofmilkorwater.Getmedicalaidatonce.Inducevomiting(touchfingertobackof throat) keeping head lower than hips (prevent aspiration into lungs).

**Inhalation:**

Giveartificialrespirationifnecessary.Getmedicalaid.Keepvictimwarm,atrest.Movevictimtofreshair.

**Notes to Physician:**

Treat symptomatically and supportively.

## Section 5 - Fire Fighting Measures

**General Information:**

Negligiblefireandexplosionhazardwhenexposedtoheatorflame.Movecontainerifpossible,avoidbreathing vapors or dust.

**Extinguishing Media:**

For small fires, usedrychemical,carbondioxide,watersprayoralcohol-resistantfoam.

**Autoignition Temperature:**

No information found.

**Flash Point:**

No information found.

**NFPA Rating:**

CAS# 7732-18-5: Not published.

CAS# 877-24-7: Not published.

CAS # 50-00-0 gas: health-3; flammability-4; reactivity-0; 37% methanol-free: health-3; flamma

CAS# 7647-01-0: Not published.

CAS# 1310-73-2: Not published.

**Explosion Limits:**

Lower:      Upper:



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### Section 6 - Accidental Release Measures

#### General Information:

Use proper personal protective equipment as indicated in Section 8.

#### Spills/Leaks:

Absorb spills with absorbent (vermiculite, sand, fuller's earth) and place in plastic bags for later disposal. Keep out of sewers/drains.

### Section 7 - Handling and Storage

#### Handling:

Wash thoroughly after handling. Avoid breathing dust, vapor, mist, or gas.

#### Storage:

Store capped at room temperature. Protect from heat and incompatibles.

### Section 8 - Exposure Controls, Personal Protection

#### Engineering Controls:

Provide local exhaust or general dilution ventilation.

#### Exposure Limits

Chemical Name:	ACGIH	NIOSH	OSHA
Water	None of the components are on this list.	None of the components are on this list.	None of the components are on this list.
Potassium hydrogen phthalate	None of the components are on this list.	None of the components are on this list.	None of the components are on this list.
Formaldehyde	None of the components are on this list.	0.016 ppm TWA; NIOSH Potential Occupational Carcinogen - see Appendix A	0.75 ppm TWA PEL; 2 ppm STEL; 0.5 ppm TWA action level; Irritant and potential c;
Hydrogen chloride	None of the components are on this list.	None of the components are on this list.	C 5 ppm; C 7 mg/m <sup>3</sup> ;
Sodium hydroxide	None of the components are on this list.	None of the components are on this list.	2 mg/m <sup>3</sup> TWA;

#### OSHA Vacated PELs

Formaldehyde: 3 ppm TWA (unless specified in 1910.1048)

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### Personal Protective Equipment

#### Eyes:

Do not wear contact lenses when working with chemicals. An eye wash fountain should be available in the immediate work area. Wear splash-proof safety goggles.

#### Skin:

Wear appropriate protective gloves to prevent skin exposure.

#### Clothing:

Wear appropriate protective clothing to prevent skin exposure.



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#### Respirators:

Notrequiredfornormaluse.Firefighting--anyself-containedbreathingapparatuswithfullfacepieceoperatedin pressure-demand mode.

## Section 9 - Physical and Chemical Properties

**Physical State:** Clear liquid

**Color:** Colorless-maybecolorcoded(dye)accordingtopH

**Odor:** Odorless

**pH:** No information found.

**Vapor Pressure:** 14mm Hg @20°C

**Vapor Density:** 0.7 (water)

**Evaporation Rate:** < ether

**Viscosity:** No information found.

**Boiling Point:** > 212°F (> 100.00°C)

**Freezing/Melting Point:** < 32°F (< 0.00°C)

**Decomposition Temperature:** No information found.

**Solubility in water:** Soluble.

**Specific Gravity/Density:** 1.0

**Molecular Formula:** No information found.

**Molecular Weight:** No information found.

## Section 10 - Stability and Reactivity

#### Chemical Stability:

Stableundernormaltemperaturesandpressuresuptoboilingpoint.

#### Conditions to Avoid:

Incompatible materials.

#### Incompatibilities with Other Materials

Oleum, sodium, water reactive substances (e.g. sulfuric acid, sodium metal, potassium metal, calcium carbide).

#### Hazardous Decomposition Products

Chlorine, formaldehyde.

#### Hazardous Polymerization

Has not been reported

## Section 11 - Toxicological Information

#### RTECS:

CAS# 7732-18-5: ZC0110000.

CAS# 877-24-7 unlisted.

CAS# 50-00-0: LP8925000.

CAS# 7647-01-0: MW4025000.

CAS# 1310-73-2: WB4900000.



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#### LD50/LC50:

CAS# 7732-18-5:

Oral, rat: LD50 = >90 mL/kg.

CAS# 877-24-7:

No information found. CAS# 50-00-0:

Inhalation, mouse: LC50 = 400 mg/m<sup>3</sup>/2H

Inhalation, rat: LC50 = 203 mg/m<sup>3</sup>

Oral, mouse: LD50 = 42 mg/kg

Oral, rat: LD50 = 100 mg/kg

Skin, rabbit: LD50 = 270 mg/kg.

CAS# 7647-01-0:

Inhalation, mouse: LC50 = 1108 ppm/1H

Inhalation, rat: LC50 = 3124 ppm/1H

Oral, rabbit: LD50 = 900 mg/kg.

CAS# 1310-73-2:

No information found.

#### Carcinogenicity:

CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 877-24-7: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 50-00-0

ACGIH: A2 - suspected human carcinogen

California: carcinogen; initial date 1/1/88

NIOSH: occupational carcinogen

NTP: Suspect carcinogen

OSHA: Possible Select carcinogen

IARC: Group 1 carcinogen

CAS# 7647-01-0

ACGIH: Not listed.

California: Not listed.

NIOSH: Not listed.

NTP: Not listed.

OSHA: Not listed.

IARC: Group 3

CAS# 1310-73-2: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

#### Epidemiology:

Potassium hydrogen phthalate is an eye, skin, and mucous membrane irritant.

#### Teratogenicity:

#### Reproductive:

#### Mutagenicity:

#### Neurotoxicity:

## Section 12 - Ecological Information

No information found.



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PhthalateSolutions

### Section 13 - Disposal Considerations

Dispose of in accordance with Federal,State,andlocalregulations.

### Section 14 - Transport Information

#### US DOT

**Shipping Name:** Not regulated.

**Hazard Class:**

**UN Number:**

**Packing Group:**

### Section 15 - Regulatory Information

#### US Federal

##### TSCA

CAS# 7732-18-5 is listed on the TSCA Inventory.

CAS# 877-24-7 is listed on the TSCA Inventory.

CAS# 50-00-0 is listed on the TSCA Inventory.

CAS# 7647-01-0 is listed on the TSCA Inventory.

CAS# 1310-73-2 is listed on the TSCA Inventory.

##### SARA Reportable Quantities (RQ)

CAS# 50-00-0: final RQ = 100 pounds (45.4 kg)

CAS# 7647-01-0: final RQ = 5000 pounds (2270 kg)

CAS# 1310-73-2: final RQ = 1000 pounds (454 kg)

##### CERCLA/SARA Section 313

Formaldehyde is not at a high enough concentration to be reportable under Section 313.

This material contains Hydrogen chloride (CAS# 7647-01-0, 0-0.1%),which is subject to the reporting requirements ofSection313ofSARATitleIIIand40CFRPart373.

##### OSHA - Highly Hazardous

CAS# 50-00-0 is considered highly hazardous by OSHA.

CAS# 7647-01-0 is considered highly hazardous by OSHA.

#### US State

##### State Right to Know

Formaldehyde can be found on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

Hydrogen chloride can be found on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

Sodium hydroxide can be found on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

##### California Regulations

#### European/International Regulations



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#### CanadianDSL/NDSL

CAS# 7732-18-5 is listed on Canada's DSL List.

CAS# 877-24-7 is listed on Canada's DSL List.

CAS# 50-00-0 is listed on Canada's DSL List.

CAS# 7647-01-0 is listed on Canada's DSL List.

CAS# 1310-73-2 is listed on Canada's DSL List.

#### Canada Ingredient Disclosure List

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

CAS# 877-24-7 is not listed on Canada's Ingredient Disclosure List.

CAS# 50-00-0 is listed on Canada's Ingredient Disclosure List.

CAS# 7647-01-0 is listed on Canada's Ingredient Disclosure List.

CAS# 1310-73-2 is listed on Canada's Ingredient Disclosure List.

## Section 16 - Other Information

MSDS Creation Date: February 14, 1998

Revision Date: October 17, 2007

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