

# MATERIAL SAFETY DATA SHEET

Buffer Solution, pH 4 (Red)

## SECTION 1 . Product and Company Identification

Product Name and Synonym: Buffer Solution, pH 4 (Red)  
Product Code: 147-20-1  
Material Uses:  
Manufacturer: OFI Testing Equipment, Inc.  
11302 Steeplecrest Drive  
Houston, TX 77065 USA  
Phone: (713) 880-9885  
Fax: (713) 880-9886  
Entry Date : 3/4/2009  
Print Date: 7/28/2010  
24 Hour Emergency Assistance : Chemtrec 800-424-9300  
Canutec 613-996-6666

Health:	0			
Flammability:	0			
Reactivity:	0			
Hazard Rating:				
Least	Slight	Moderate	High	Extreme
0	1	2	3	4
NA = Not Applicable		NE = Not Established		

## SECTION 2 HAZARD IDENTIFICATION

May be harmful if swallowed. May cause irritation. Avoid breathing vapors, or dusts. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

Emergency Overview: Caution! May Cause Irritation to Skin and Eyes.

Inhalation: No Adverse Health Effects Expected from Inhalation.

Ingestion: Large Doses may Cause Stomach Upset.

Skin: Not Expected to be a Health Hazard from Skin Exposure. May Cause Mild Irritation and Redness.

Eye Contact: Not Expected to be a Health Hazard. May Cause Mild Irritation, Possible Reddening.

Chronic Exposure: No Information Found.

Aggravated by Exposure: No Information Found.

## SECTION 3 MIXTURE COMPONENTS

SARA 313	Component	CAS Number	Percent Comp.	Dimension	Exposure Limits
<input type="checkbox"/>	Methyl Red Sodium Salt	CAS# 845-10-3	< 0.01%	W/V	None Established
<input type="checkbox"/>	Potassium Hydrogen Phthalate	CAS# 877-24-7	1.02%	W/V	TXDS: orl-rat LD <sub>50</sub> : 3200 mg/Kg
<input type="checkbox"/>	Thymol Crystal	CAS# 89-83-8	0.01%	W/V	TXDS: orl-rat LD <sub>50</sub> : 640 mg/Kg
<input type="checkbox"/>	Water, Deionized ASTM Type II	CAS# 7732-18-5	Balance	V/V	None Established

## SECTION 4 FIRST AID MEASURES

May be harmful if swallowed. May cause irritation. Avoid breathing vapors, or dusts. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash

Buffer Solution, pH 4 (Red)

thoroughly after handling. Keep container closed.

FIRST AID: SKIN: Wash exposed area with soap and water. If irritation persists, seek medical attention.

EYES: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. Seek Medical Aid. INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen

INGESTION: If swallowed, induce vomiting immediately after giving two glasses of water. Never give anything by mouth to an unconscious person.

**SECTION 5 FIRE FIGHTING MEASURES**

Fire Extinguisher Type: Any means suitable for extinguishing surrounding fire  
Fire / Explosion Hazards: None  
Fire Fighting Procedure: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and clothing.

**SECTION 6 ACCIDENTAL RELEASE MEASURES**

Absorb spill with inert material. Flush excess down drain.  
Ventilate area of Leak or Spill. Keep Unnecessary and Unprotected People away from the area of 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). Do Not use Combustible Materials, such as Saw Dust. US Regulations (CERCLA) Require Reporting Spills and Releases to Soil, Water and Air in Excess of Reportable Quantities.

**SECTION 7 HANDLING AND STORAGE**

Store in a cool dry place. This Material is not considered hazardous. Handle using safe laboratory practices.

**SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION**

Respiratory Protection: None required  
Ventilation  
Local Exhaust   
Mechanical   
Protective Gloves: Gloves to prevent skin exposure as rubber or vinyl  
Eye Protection: Safety Glasses w/Side Shields  
Other Protective Equipment: Use safe laboratory handling procedures.

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

Melting Point:	~ 0° C	Percent Volatile by Volume:	> 99%
Boiling Point:	~ 100° C	Evaporation Rate	Information not available
Vapor Pressure:	Information not available	Evaporation Standard	
Vapor Density:	Information not available	Auto Ignition Temp	Not applicable

Buffer Solution, pH 4 (Red)

Solubility in Water:	Soluble	Lower Flamm. Limit in Air	Not applicable
Appearance /Odors:	Clear red solution/Slight benzoic acid odor	Upper Flamm. Limit in Air	Not applicable
Flash Point:	not flammable		
Specific Gravity:	~ 1		

**SECTION 10 STABILITY AND REACTIVITY INFORMATION**

Stability:	Stable
Conditions to Avoid:	High temperature, air
Materials to Avoid:	Strong acids and bases
Hazardous Decomposition Products:	Not known to occur
Hazardous polymerization:	Will Not Occur
Conditions to Avoid:	None known

**SECTION 11 Toxicological Information**

Carcinogenic References: NTP Carcinogen - Known: No, IARC Category- None

**SECTION 12 Ecological Information**

No Information Found.

**SECTION 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.

**SECTION 14 Transport Information**

DOT Classification: Not Regulated

DOT Regulations may change from time to time. Please consult the most recent D.O.T. regulations.

**SECTION 15 Regulatory Information**

Chemical Inventory Status –  
Part 1:Ingredient  
Potassium Acid Phthalate (877-24-7)  
TSCA Yes  
EC Yes  
Japan No  
Australia Yes

Chemical Inventory Status –  
Part 2:Ingredient  
Potassium Acid Phthalate (877-24-7)  
Korea Yes  
DSL Yes  
NDSL NO  
Phil. Yes

Federal, State & International Regulations –  
Part 1: Ingredient.  
Potassium Acid Phthalate (877-24-7)

Buffer Solution, pH 4 (Red)

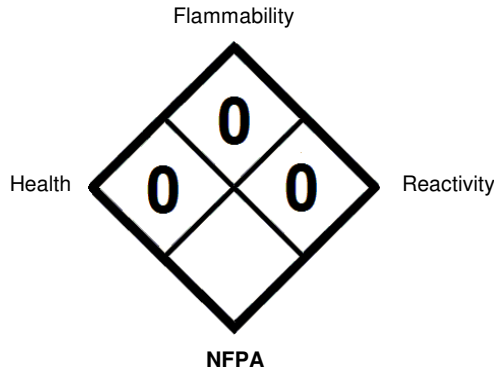
RQ NO  
TPQ NO  
List NO  
Chemical Catg No

Federal, State &  
International Regulations –  
Part 2:Ingredient  
Potassium Acid Phthalate (877-24-7)  
CERCLA NO  
261.33 No  
8(d) No

Chemical Weapons Convention:No  
TSCA 12 (b):No  
CDTA:NO Mixture/Liquid  
SARA 311/312: Acute: Yes  
Chronic: NO  
Fire: No  
Pressure: No  
Reactivity: No  
Australian Hazchem Code: None  
Poison Schedule: None allocated

**SECTION 16 Additional Information**

Overexposure symptoms. Acute: Essentially non-hazardous. Possible irritation of eyes/stomach. Chronic: None known. Conditions aggravated/Target organs: none known.



**Revisions**

7/28/2010	0.1	updated msds to 16 section from 10 section msds. STN
-----------	-----	--

The information herein is believed to be accurate and is offered in good faith for the user's consideration and investigation. No warranty either expressed or implied is made for the completeness or accuracy of the information whether originating from the above mentioned company or not. Users of this material should satisfy themselves by independent investigation of current scientific and medical knowledge that the material can be used safely.