



# SAFETY DATA SHEET

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Preparation Date: 01/01/2019

Revision Date: N/A

Revision Number: 1

**SECTION 1 Identification****1.1. Product Identifier**

Trade Name or Designation: Buffer Solution, (Giordano) pH 6.4

Product Number: B16034`

**1.2. Recommended Use and Restrictions on Use**

General Laboratory Reagent

**1.3. Details of the Supplier of the Safety Data Sheet****Dawn Scientific Inc**

121 Liberty Street, Metuchen, NJ, 08840

Tel : 732-902-6300 | Fax : 973-802-1005

sales@dawnscientific.com | www.dawnscientific.com

**1.4. Emergency Telephone Number (24 hours)**

CHEMTREC (USA) 800-424-9300

**SECTION 2: Hazard(s) identification****2.1. Classification of the substance or mixture****GHS-US classification**

Not classified

**2.2. Label elements**

Not classified as a hazardous chemical.

**2.3. Other hazards**

Other hazards not contributing to the classification : None.

**2.4. Unknown acute toxicity (GHS US)**

Not applicable

**SECTION 3: Composition/Information on ingredients****3.1. Substances**

Not applicable

**3.2. Mixtures**

Name	Product identifier	%
Water	(CAS No) 7732-18-5	98.98
Potassium Phosphate, Monobasic	(CAS No) 7778-77-0	0.66
Sodium Phosphate, Dibasic, Anhydrous	(CAS No) 7558-79-4	0.32
Formaldehyde, 37% w/w	(CAS No) 50-00-0	0.04

Full text of hazard classes and H-statements : see section 16

**SECTION 4: First aid measures****4.1. Description of first aid measures**

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation	: Allow victim to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

#### **4.2. Most important symptoms and effects, both acute and delayed**

Symptoms/injuries	: Not expected to present a significant hazard under anticipated conditions of normal use.
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#### **4.3. Indication of any immediate medical attention and special treatment needed**

Obtain medical assistance.

### **SECTION 5: Firefighting measures**

#### **5.1. Extinguishing media**

Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.

#### **5.2. Special hazards arising from the substance or mixture**

No additional information available

#### **5.3. Advice for firefighters**

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

### **SECTION 6: Accidental release measures**

#### **6.1. Personal precautions, protective equipment and emergency procedures**

##### **6.1.1. For non-emergency personnel**

Protective equipment	: Safety glasses.
Emergency procedures	: Evacuate unnecessary personnel.

##### **6.1.2. For emergency responders**

Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Ventilate area.

#### **6.2. Environmental precautions**

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

#### **6.3. Methods and material for containment and cleaning up**

Methods for cleaning up	: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
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#### **6.4. Reference to other sections**

See Heading 8. Exposure controls and personal protection.

### **SECTION 7: Handling and storage**

#### **7.1. Precautions for safe handling**

Precautions for safe handling	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.
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#### **7.2. Conditions for safe storage, including any incompatibilities**

Storage conditions	: Keep container closed when not in use.
Incompatible products	: Strong bases. Strong acids.
Incompatible materials	: Sources of ignition. Direct sunlight.

### **SECTION 8: Exposure controls/personal protection**

#### **8.1. Control parameters**

##### **Water (7732-18-5)**

Not applicable

Potassium Phosphate, Monobasic (7778-77-0)		
Not applicable		
Formaldehyde, 37% w/w (50-00-0)		
ACGIH	ACGIH Ceiling (mg/m <sup>3</sup> )	0.37 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (ppm)	0.75 ppm
OSHA	OSHA PEL (STEL) (ppm)	2 ppm
IDLH	US IDLH (ppm)	20 ppm
NIOSH	NIOSH REL (TWA) (ppm)	0.016 ppm
NIOSH	NIOSH REL (ceiling) (ppm)	0.1 ppm 15 min.
Sodium Phosphate, Dibasic, Anhydrous (7558-79-4)		
Not applicable		

## 8.2. Exposure controls

- Appropriate engineering controls : Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation.
- Personal protective equipment : Safety glasses.



- Eye protection : Chemical goggles or safety glasses.
- Respiratory protection : Respiratory protection not required in normal conditions.
- Other information : Do not eat, drink or smoke during use.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Color : Colorless
- Odor : None.
- Odor threshold : No data available
- pH : 6.4
- Melting point : No data available
- Freezing point : No data available
- Boiling point : No data available
- Flash point : No data available
- Relative evaporation rate (butyl acetate=1) : No data available
- Flammability (solid, gas) : Non flammable.
- Vapor pressure : No data available
- Relative vapor density at 20 °C : No data available
- Relative density : No data available
- Specific gravity / density : 1 g/ml
- Solubility : Miscible with water.
- Log Pow : No data available
- Auto-ignition temperature : No data available
- Decomposition temperature : No data available
- Viscosity, kinematic : No data available
- Viscosity, dynamic : No data available
- Explosion limits : No data available
- Explosive properties : No data available
- Oxidizing properties : No data available

**9.2. Other information**

No additional information available

**SECTION 10: Stability and reactivity****10.1. Reactivity**

No additional information available

**10.2. Chemical stability**

Stable under normal conditions.

**10.3. Possibility of hazardous reactions**

Not established.

**10.4. Conditions to avoid**

Direct sunlight. Extremely high or low temperatures.

**10.5. Incompatible materials**

Strong acids. Strong bases.

**10.6. Hazardous decomposition products**

Gaseous ammonia. Phosphorus oxides.

**SECTION 11: Toxicological information****11.1. Information on toxicological effects**

Likely routes of exposure : Skin and eye contact

Acute toxicity : Not classified

<b>Water (7732-18-5)</b>	
LD50 oral rat	≥ 90000 mg/kg
ATE US (oral)	90000.000 mg/kg body weight

<b>Potassium Phosphate, Monobasic (7778-77-0)</b>	
LD50 dermal rabbit	4640 mg/kg
ATE US (dermal)	4640.000 mg/kg body weight

<b>Formaldehyde, 37% w/w (50-00-0)</b>	
LD50 oral rat	500 mg/kg
ATE US (oral)	500.000 mg/kg body weight
ATE US (dermal)	2000.000 mg/kg body weight
ATE US (vapors)	0.578 mg/l/4h

<b>Sodium Phosphate, Dibasic, Anhydrous (7558-79-4)</b>	
LD50 oral rat	5950 mg/kg
LD50 dermal rabbit	≥ 7940 mg/kg
ATE US (oral)	5950.000 mg/kg body weight
ATE US (dermal)	7940.000 mg/kg body weight

Skin corrosion/irritation : Not classified  
pH: 6.4

Serious eye damage/irritation : Not classified  
pH: 6.4

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

<b>Formaldehyde, 37% w/w (50-00-0)</b>	
IARC group	1 - Carcinogenic to humans

Reproductive toxicity : Not classified

Specific target organ toxicity – single exposure : Not classified

Specific target organ toxicity – repeated exposure : Not classified

Aspiration hazard : Not classified

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

## SECTION 12: Ecological information

### 12.1. Toxicity

Formaldehyde, 37% w/w (50-00-0)	
LC50 fish 1	41 mg/l (LC50; 96 h)
EC50 Daphnia 1	14.7 mg/l (EC50; 24 h)
EC50 Daphnia 2	2 mg/l
Threshold limit algae 1	2.5 mg/l (EC0; 192 h)
Sodium Phosphate, Dibasic, Anhydrous (7558-79-4)	
LC50 fish 1	≥ 100 mg/l
EC50 Daphnia 1	≥ 100 mg/l

### 12.2. Persistence and degradability

Buffer Solution, Giordano, pH 6.4	
Persistence and degradability	Not established.
Water (7732-18-5)	
Persistence and degradability	Not established.
Potassium Phosphate, Monobasic (7778-77-0)	
Persistence and degradability	Not established.
Formaldehyde, 37% w/w (50-00-0)	
Persistence and degradability	Readily biodegradable in water. Biodegradability in soil: no data available. No test data on mobility of the components available. Photodegradation in the air.
Biochemical oxygen demand (BOD)	0.64 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.06 g O <sub>2</sub> /g substance
ThOD	1.068 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.6 (5 days; Literature study)
Sodium Phosphate, Dibasic, Anhydrous (7558-79-4)	
Persistence and degradability	Not established.

### 12.3. Bioaccumulative potential

Buffer Solution, Giordano, pH 6.4	
Bioaccumulative potential	Not established.
Water (7732-18-5)	
Bioaccumulative potential	Not established.
Potassium Phosphate, Monobasic (7778-77-0)	
Bioaccumulative potential	Not established.
Formaldehyde, 37% w/w (50-00-0)	
Log Pow	-0.78 - 0.0
Bioaccumulative potential	Bioaccumulation: not applicable.
Sodium Phosphate, Dibasic, Anhydrous (7558-79-4)	
Bioaccumulative potential	Not established.

### 12.4. Mobility in soil

Formaldehyde, 37% w/w (50-00-0)	
Ecology - soil	Toxic to flora.

#### 12.5. Other adverse effects

Effect on the global warming	: No known effects from this product.
GWPmix comment	: No known effects from this product.
Other information	: Avoid release to the environment.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials	: Avoid release to the environment.

### SECTION 14: Transport information

#### Department of Transportation (DOT)

In accordance with DOT

Not regulated

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

Formaldehyde, 37% w/w (50-00-0)	
RQ (Reportable quantity, section 304 of EPA's List of Lists)	100 lb
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	0.1 %
Sodium Phosphate, Dibasic, Anhydrous (7558-79-4)	
RQ (Reportable quantity, section 304 of EPA's List of Lists)	5000 lb

#### 15.2. International regulations

##### CANADA

Buffer Solution, Giordano, pH 6.4	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria
Water (7732-18-5)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria
Potassium Phosphate, Monobasic (7778-77-0)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria
Formaldehyde, 37% w/w (50-00-0)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Class B Division 3 - Combustible Liquid Class D Division 1 Subdivision A - Very toxic material causing immediate and serious toxic effects Class D Division 2 Subdivision A - Very toxic material causing other toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects Class E - Corrosive Material
Sodium Phosphate, Dibasic, Anhydrous (7558-79-4)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects

## EU-Regulations

No additional information available

## National regulations

<b>Formaldehyde, 37% w/w (50-00-0)</b>
Listed on the Canadian IDL (Ingredient Disclosure List)
<b>Sodium Phosphate, Dibasic, Anhydrous (7558-79-4)</b>
Not listed on the Canadian IDL (Ingredient Disclosure List)

### 15.3. US State regulations

California Proposition 65 - This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer, developmental and/or reproductive harm

<b>Formaldehyde, 37% w/w (50-00-0)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	No	No	40 µg/day

## SECTION 16: Other information

Revision date : 12/28/2016

Other information : None.

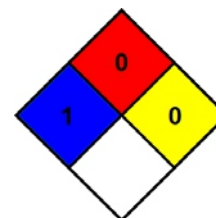
Full text of H-phrases: see section 16:

H226	Flammable liquid and vapor
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H320	Causes eye irritation
H330	Fatal if inhaled
H350	May cause cancer
H370	Causes damage to organs
H401	Toxic to aquatic life

NFPA health hazard : 1 - Materials that, under emergency conditions, can cause significant irritation.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



### HMIS III Rating

Health : 1 Slight Hazard - Irritation or minor reversible injury possible

Flammability : 0 Minimal Hazard - Materials that will not burn

Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal protection : A - Safety glasses

Last Revision Date: 01/01/2019

## DISCLAIMER

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us.

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