



Be Right™

# SAFETY DATA SHEET

Issue Date 08-Sep-2016

Revision Date 29-Sep-2016

Version 3

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## 1. IDENTIFICATION

### Product identifier

**Product Name** Buffer Powder Pillows pH 7.00 ± 0.02 @ 25°C

### Other means of identification

**Product Code(s)** 2227095

**Safety data sheet number** M00112

### Recommended use of the chemical and restrictions on use

**Recommended Use** Laboratory reagent. Buffer.

**Uses advised against** None.

**Restrictions on use** None.

### Details of the supplier of the safety data sheet

#### Manufacturer Address

Hach Company  
P.O.Box 389 Loveland, CO 80539 USA  
(970) 669-3050

#### Emergency telephone number

(303) 623-5716 - 24 Hour Service (515)232-2533 - 8am - 4pm CST

## 2. HAZARDS IDENTIFICATION

### Classification

#### **Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A

#### **Hazards not otherwise classified (HNOC)**

Not applicable

#### **Label elements**

**Signal word - Warning**



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**Hazard statements**

H315 - Causes skin irritation  
H319 - Causes serious eye irritation

**Precautionary statements**

P264 - Wash face, hands and any exposed skin thoroughly after handling  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P337 + P313 - If eye irritation persists: Get medical advice/attention  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
P332 + P313 - If skin irritation occurs: Get medical advice/attention  
P362 - Take off contaminated clothing and wash before reuse

**Other Information**

May be harmful if swallowed

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Substance**

Not applicable

**Mixture**

Percent ranges are used where confidential product information is applicable.

Chemical Name	CAS No	Percent Range	HMRIC #
Sodium phosphate dibasic	7558-79-4	50 - 100%	-
Phosphoric acid, potassium salt (1:1)	7778-77-0	30 - 50%	-
2,4-Dinitrophenol	51-28-5	0.1 - 1%	-

## 4. FIRST AID MEASURES

### Description of first aid measures

<b>General advice</b>	In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
<b>Eye contact</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If symptoms persist, call a physician.
<b>Skin contact</b>	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If symptoms persist, call a physician.
<b>Inhalation</b>	IF INHALED: Remove person to fresh air and keep comfortable for breathing. If symptoms persist, call a physician.
<b>Ingestion</b>	IF SWALLOWED: Rinse Mouth. If symptoms persist, call a physician.
<b>Self-protection of the first aider</b>	Use personal protective equipment as required. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

### Most important symptoms and effects, both acute and delayed

**Symptoms** See Section 11: TOXICOLOGICAL INFORMATION.

### Indication of any immediate medical attention and special treatment needed

**Note to physicians** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

### Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** Caution: Use of water spray when fighting fire may be inefficient.

### Flammable properties

During a fire, irritating and highly toxic gases may be generated by thermal decomposition.

### Specific hazards arising from the chemical

None reported.

**Hazardous combustion products**

Phosphorus oxides.

### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

### **U.S. Notice**

Only persons properly qualified to respond to an emergency involving hazardous substances may respond to a spill according to federal regulations (OSHA 29 CFR 1910.120(a)(v)) and per your company's emergency response plan and guidelines/procedures. See Section 13, Special Instructions for disposal assistance. Outside of the US, only persons properly qualified according to state or local regulations should respond to a spill involving chemicals.

### **EC Notice**

Only persons properly qualified to respond to an emergency involving hazardous substances should respond to a spill involving chemicals. See Section 13, Special Instructions for disposal assistance.

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**WHMIS Notice** Only persons properly qualified to respond to an emergency involving hazardous substances should respond to a spill involving chemicals. See Section 13, Special Instructions for disposal assistance.

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Evacuate personnel to safe areas. Do not touch or walk through spilled material. Ventilate affected area. Use personal protective equipment as required.

**For emergency responders** Use personal protection recommended in Section 8.

**Environmental precautions**

**Environmental precautions** Avoid release to the environment. See Section 12 for additional ecological information.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so. Cover with plastic sheet to prevent spreading.

**Methods for cleaning up** Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Dispose of in accordance with local, state and federal regulations or laws.

**Emergency Response Guide Number** Not applicable

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Advice on safe handling** Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Do not breathe dust/fume/gas/mist/vapors/spray.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children.

**Flammability class** Not applicable

**Incompatible materials** Strong oxidizing agents. Strong acids. Strong bases.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**Exposure Guidelines** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Legend** See section 16 for terms and abbreviations

**Appropriate engineering controls**

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems

**Individual protection measures, such as personal protective equipment**

<b>Eye/face protection</b>	Wear tight sealing safety goggles and/or face protection shield.
<b>Skin and body protection</b>	Wear protective gloves and protective clothing.
<b>Respiratory protection</b>	In case of insufficient ventilation, wear suitable respiratory equipment.
<b>General Hygiene Considerations</b>	Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Take off all contaminated clothing and wash it before reuse. Wash hands thoroughly after handling. Regular cleaning of equipment, work area and clothing is recommended.

**Environmental exposure controls**

Do not allow into any sewer, on the ground or into any body of water.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

<b>Physical state</b>	Solid		
<b>Gas Under Pressure</b>	Not classified according to GHS criteria		
<b>Appearance</b>	powder	<b>Color</b>	light yellow
<b>Odor</b>	Not determined	<b>Odor threshold</b>	No data available

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>
<b>Molecular weight</b>	No data available	
<b>pH</b>	7	15.8% Solution
<b>Melting point/freezing point</b>	~ 160 °C / 320 °F	Estimation based on theoretical calculation
<b>Boiling point / boiling range</b>	No data available	
<b>Evaporation rate</b>	Not applicable	
<b>Vapor pressure</b>	Not applicable	
<b>Vapor density (air = 1)</b>	Not applicable	
<b>Specific gravity (water = 1 / air = 1)</b>	2.40	
<b>Partition Coefficient (n-octanol/water)</b>	No data available	
<b>Soil Organic Carbon-Water Partition Coefficient</b>	No data available	
<b>Autoignition temperature</b>	No data available	
<b>Decomposition temperature</b>	No data available	
<b>Dynamic viscosity</b>	Not applicable	
<b>Kinematic viscosity</b>	Not applicable	

### Solubility(ies)

#### Water solubility

<u>Water solubility classification</u>	<u>Water solubility</u>	<u>Water Solubility Temperature</u>
Soluble	> 1000 mg/L	25 °C / 77 °F

#### Solubility in other solvents

<u>Chemical Name</u>	<u>Solubility classification</u>	<u>Solubility</u>	<u>Solubility Temperature</u>
None reported	No information available	No data available	No information available

### Other Information

<b>Metal Corrosivity</b>	Not classified as corrosive to metal according to GHS criteria
<b>Steel Corrosion Rate</b>	Not applicable
<b>Aluminum Corrosion Rate</b>	Not applicable
<b>Volatile Organic Compounds (VOC) Content</b>	Not applicable.
<b>Bulk density</b>	No data available
<b>Explosive properties</b>	Not classified according to GHS criteria.
<b>Explosion data</b>	During a fire, corrosive and toxic gases may be generated by thermal decomposition.
<b>Upper explosion limit</b>	No data available
<b>Lower explosion limit</b>	No data available
<b>Flammable properties</b>	During a fire, irritating and highly toxic gases may be generated by thermal decomposition.
<b>Flammability Limit in Air</b>	
<b>Upper flammability limit:</b>	No data available
<b>Lower flammability limit:</b>	No data available
<b>Flash point</b>	Not applicable
<b>Method</b>	No information available
<b>Oxidizing properties</b>	Not classified according to GHS criteria.
<b>Reactivity properties</b>	Not classified as self-reactive, pyrophoric, self-heating or emitting flammable gases in contact with water according to GHS criteria.

## 10. STABILITY AND REACTIVITY

### Reactivity properties

Not classified as self-reactive, pyrophoric, self-heating or emitting flammable gases in contact with water according to GHS criteria

### Chemical stability

Stable under recommended storage conditions.

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**Special dangers of the product**

None reported

**Possibility of Hazardous Reactions**

None under normal processing.

**Hazardous polymerization** Hazardous polymerization does not occur.

**Conditions to avoid**

Excess moisture. Extreme temperatures.

**Incompatible materials**

Strong oxidizing agents. Strong acids. Strong bases.

**Hazardous Decomposition Products**

Phosphorus oxides.

**Explosive properties**

Not classified according to GHS criteria. During a fire, corrosive and toxic gases may be generated by thermal decomposition.

**Upper explosion limit** No data available

**Lower explosion limit** No data available

**Autoignition temperature**

No data available

**Sensitivity to Static Discharge**

None reported

**Sensitivity to Mechanical Impact**

None reported

**11. TOXICOLOGICAL INFORMATION**

**NIOSH (RTECS) Number** None reported

**Information on Likely Routes of Exposure**

<b>Product Information</b>	Causes skin irritation. Causes serious eye irritation. May be harmful if swallowed.
<b>Inhalation</b>	No known effect based on information supplied.
<b>Eye contact</b>	Contact with eyes may cause irritation. Severely irritating to eyes.
<b>Skin contact</b>	Causes skin irritation.
<b>Ingestion</b>	May be harmful if swallowed. Ingestion may cause irritation to mucous membranes.
<b>Aggravated Medical Conditions</b>	Skin disorders. Eye disorders.
<b>Toxicologically synergistic products</b>	None known.
<b>Toxicokinetics, metabolism and distribution</b>	See ingredients information below.

<b>Chemical Name</b>	<b>Toxicokinetics, metabolism and distribution</b>
Sodium phosphate dibasic (50 - 100%)	Phosphates are widely utilized by cells for metabolism of proteins, fats and carbohydrates.

CAS#: 7558-79-4
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**Product Acute Toxicity Data**

Oral Exposure Route	No data available
Dermal Exposure Route	No data available
Inhalation (Dust/Mist) Exposure Route	No data available
Inhalation (Vapor) Exposure Route	No data available
Inhalation (Gas) Exposure Route	No data available

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	3,885.00 mg/kg
ATEmix (inhalation-dust/mist)	501.00 mg/L

**Ingredient Acute Toxicity Data**

**Oral Exposure Route**

Chemical Name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Phosphoric acid, potassium salt (1:1) (30 - 50%) CAS#: 7778-77-0	Mouse LD <sub>50</sub>	1700 mg/kg	None reported	None reported	IUCLID (The International Uniform Chemical Information Database)
Chemical Name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium phosphate dibasic (50 - 100%) CAS#: 7558-79-4	Rat LD <sub>50</sub>	17000 mg/kg	None reported	None reported	RTECS (Registry of Toxic Effects of Chemical Substances)
2,4-Dinitrophenol (0.1 - 1%) CAS#: 51-28-5	Mouse LD <sub>50</sub>	45 mg/kg	None reported	None reported	RTECS (Registry of Toxic Effects of Chemical Substances)
Chemical Name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
2,4-Dinitrophenol (0.1 - 1%) CAS#: 51-28-5	Human LD <sub>Lo</sub>	36 mg/kg	None reported	<b>Behavioral</b> Coma <b>Cardiac</b> Pulse rate increase without fall in BP	RTECS (Registry of Toxic Effects of Chemical Substances)
Chemical Name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
2,4-Dinitrophenol (0.1 - 1%) CAS#: 51-28-5	Rat TD <sub>Lo</sub>	30 mg/kg	None reported	<b>Behavioral</b> Decreased locomotor activity <b>Gastrointestinal</b> Salivation	RTECS (Registry of Toxic Effects of Chemical Substances)

**Dermal Exposure Route**

Chemical Name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Phosphoric acid, potassium salt (1:1) (30 - 50%) CAS#: 7778-77-0	Rabbit LD <sub>50</sub>	> 4640 mg/kg	None reported	None reported	RTECS (Registry of Toxic Effects of Chemical Substances)
Chemical Name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
2,4-Dinitrophenol	Guinea pig	700 mg/kg	None	None reported	RTECS (Registry of Toxic



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(0.1 - 1%) CAS#: 51-28-5	TD <sub>Lo</sub>		reported		Effects of Chemical Substances)
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**Inhalation (Dust/Mist) Exposure Route**

**Inhalation (Vapor) Exposure Route** No data available

**Inhalation (Gas) Exposure Route** No data available

**Product Skin Corrosion/Irritation Data**

No data available.

**Ingredient Skin Corrosion/Irritation Data**

Chemical Name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium phosphate dibasic (50 - 100%) CAS#: 7558-79-4	Standard Draize Test	Rabbit	500 mg	24 hours	Skin irritant	RTECS (Registry of Toxic Effects of Chemical Substances)
2,4-Dinitrophenol (0.1 - 1%) CAS#: 51-28-5	Standard Draize Test	Rabbit	300 mg	4 weeks	Mild skin irritant	RTECS (Registry of Toxic Effects of Chemical Substances)

**Product Serious Eye Damage/Eye Irritation Data**

No data available.

**Ingredient Eye Damage/Eye Irritation Data**

Chemical Name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium phosphate dibasic (50 - 100%) CAS#: 7558-79-4	Standard Draize Test	Rabbit	500 mg	24 hours	Eye irritant	RTECS (Registry of Toxic Effects of Chemical Substances)

**Sensitization Information**

**Product Sensitization Data**

**Skin Sensitization Exposure Route** No data available.

**Respiratory Sensitization Exposure Route** No data available.

**Ingredient Sensitization Data**

**Skin Sensitization Exposure Route** No data available.

**Respiratory Sensitization Exposure Route** No data available.

**Chronic Toxicity Information**

**Product Repeat Dose Toxicity Data**

**Oral Exposure Route** No data available.

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Dermal Exposure Route No data available.  
 Inhalation (Dust/Mist) Exposure Route No data available.  
 Inhalation (Vapor) Exposure Route No data available.  
 Inhalation (Gas) Exposure Route No data available.

**Ingredient Repeat Dose Toxicity Data**

**Oral Exposure Route**

Chemical Name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
2,4-Dinitrophenol (0.1 - 1%) CAS#: 51-28-5	Rat TD <sub>Lo</sub>	540 mg/kg	18 days	<b>Behavioral</b> Somnolence (general depressed activity) Convulsions or effect on seizure threshold Death	RTECS (Registry of Toxic Effects of Chemical Substances)
Chemical Name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
2,4-Dinitrophenol (0.1 - 1%) CAS#: 51-28-5	Rat TD <sub>Lo</sub>	360 mg/kg	18 days	<b>Brain and Coverings</b> Other degenerative changes <b>Blood</b>	RTECS (Registry of Toxic Effects of Chemical Substances)

Dermal Exposure Route No data available  
 Inhalation (Dust/Mist) Exposure Route No data available  
 Inhalation (Vapor) Exposure Route No data available  
 Inhalation (Gas) Exposure Route No data available

Chemical Name	CAS No	ACGIH	IARC	NTP	OSHA
Sodium phosphate dibasic	7558-79-4	-	-	-	-
Phosphoric acid, potassium salt (1:1)	7778-77-0	-	-	-	-
2,4-Dinitrophenol	51-28-5	-	-	-	-

**Legend**

<b>ACGIH (American Conference of Governmental Industrial Hygienists)</b>	Does not apply
<b>IARC (International Agency for Research on Cancer)</b>	Does not apply
<b>NTP (National Toxicology Program)</b>	Does not apply
<b>OSHA (Occupational Safety and Health Administration of the US Department of Labor)</b>	X - Present

Product Carcinogenicity Data No data available  
 Oral Exposure Route No data available  
 Dermal Exposure Route No data available  
 Inhalation (Dust/Mist) Exposure Route No data available  
 Inhalation (Vapor) Exposure Route No data available  
 Inhalation (Gas) Exposure Route No data available

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**Ingredient Carcinogenicity Data**

Oral Exposure Route No data available  
Dermal Exposure Route No data available  
Inhalation (Dust/Mist) Exposure Route No data available  
Inhalation (Vapor) Exposure Route No data available  
Inhalation (Gas) Exposure Route No data available

**Product Germ Cell Mutagenicity *invitro* Data**

No data available.

**Ingredient Germ Cell Mutagenicity *invitro* Data**

Toxicological data for ingredients is not indicative of likely harm.

Chemical Name	Test	Cell Strain	Reported dose	Exposure time	Results	Key literature references and sources for data
2,4-Dinitrophenol (0.1 - 1%) CAS#: 51-28-5	DNA damage	Rat liver	0.1 mmol/L	None reported	Positive test result for mutagenicity	RTECS (Registry of Toxic Effects of Chemical Substances)
Chemical Name	Test	Cell Strain	Reported dose	Exposure time	Results	Key literature references and sources for data
2,4-Dinitrophenol (0.1 - 1%) CAS#: 51-28-5	DNA inhibition	Hamster lung	7 mmol/L	None reported	Positive test result for mutagenicity	RTECS (Registry of Toxic Effects of Chemical Substances)

Oral Exposure Route No data available  
Dermal Exposure Route No data available  
Inhalation (Dust/Mist) Exposure Route No data available  
Inhalation (Vapor) Exposure Route No data available  
Inhalation (Gas) Exposure Route No data available

**Ingredient Germ Cell Mutagenicity *invivo* Data**

**Oral Exposure Route**

Toxicological data for ingredients is not indicative of likely harm.

Chemical Name	Test	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
2,4-Dinitrophenol (0.1 - 1%) CAS#: 51-28-5	DNA damage	Mouse	50 mg/kg	3 hours	Positive test result for mutagenicity	RTECS (Registry of Toxic Effects of Chemical Substances)

Dermal Exposure Route No data available  
Inhalation (Dust/Mist) Exposure Route No data available  
Inhalation (Vapor) Exposure Route No data available  
Inhalation (Gas) Exposure Route No data available

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**Oral Exposure Route** No data available  
**Dermal Exposure Route** No data available  
**Inhalation (Dust/Mist) Exposure Route** No data available  
**Inhalation (Vapor) Exposure Route** No data available  
**Inhalation (Gas) Exposure Route** No data available

**Ingredient Reproductive Toxicity Data**

**Oral Exposure Route** Toxicological data for ingredients is not indicative of likely harm.

Chemical Name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
2,4-Dinitrophenol (0.1 - 1%) CAS#: 51-28-5	Rat TD <sub>Lo</sub>	2040 mg/kg	21 days	<b>Effects on Newborn</b> Stillbirth Weaning or lactation index (e.g. # alive at weaning per # alive at day 4)	RTECS (Registry of Toxic Effects of Chemical Substances)

**Dermal Exposure Route** No data available  
**Inhalation (Dust/Mist) Exposure Route** No data available  
**Inhalation (Vapor) Exposure Route** No data available  
**Inhalation (Gas) Exposure Route** No data available

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity** Based on the classification principles, not classified as hazardous to the environment.

**Product Ecological Data**

**Aquatic toxicity**

**Fish** No data available  
**Crustacea** No data available  
**Algae** No data available

**Terrestrial toxicity**

**Soil** No data available  
**Vertebrates** No data available  
**Invertebrates** No data available

**Ingredient Ecological Data**

**Aquatic toxicity**

**Fish**

Chemical Name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
2,4-Dinitrophenol (0.1 - 1%) CAS#: 51-28-5	96 hours	None reported	LC <sub>50</sub>	0.39 mg/L	RTECS (Registry of Toxic Effects of Chemical Substances)

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**Crustacea**

No data available

**Algae**

Chemical Name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
2,4-Dinitrophenol (0.1 - 1%) CAS#: 51-28-5	96 hours	None reported	EC <sub>50</sub>	10.9 mg/L	RTECS (Registry of Toxic Effects of Chemical Substances)

**Terrestrial toxicity**

**Soil**

No data available

**Vertebrates**

No data available

**Invertebrates**

No data available

**Other Information**

Canadian Environmental Protection Act (CEPA) - Domestic Substances List (DSL): Environmentally Hazardous Substances Categorizations					
Chemical Name	CAS No	Category	Persistent	Bioaccumulation	Inherently Toxic to Aquatic Organisms
Sodium phosphate dibasic	7558-79-4	-	-	-	-
Phosphoric acid, potassium salt (1:1)	7778-77-0	-	-	-	-
2,4-Dinitrophenol	51-28-5	-	-	-	-

**Persistence and degradability**

None known.

**Product Biodegradability Data**

No data available.

**Ingredient Biodegradability Data**

No data available

**Bioaccumulation**

Has the potential to bioaccumulate according to GHS criteria.

**Product Bioaccumulation Data**

No data available.

**Ingredient Bioaccumulation Data**

No data available

**Additional information**

**Product Information**

No data available

**Partition Coefficient (n-octanol/water)**

No data available

**Ingredient Information**

**Mobility**

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Mobility in soil: Moderate to high mobility. If available, see ingredient data below.

Product Information No data available

Soil Organic Carbon-Water Partition Coefficient No data available

**Ingredient Information**

Chemical Name	Soil Organic Carbon-Water Partition Coefficient	Method
2,4-Dinitrophenol (0.1 - 1%) CAS#: 51-28-5	log K <sub>oc</sub> = 2.454	No information available

Additional information

**Water solubility**

**Product Information**

Water solubility classification	Water solubility	Water Solubility Temperature
Soluble	> 1000 mg/L	25 °C / 77 °F

**Ingredient Information**

Chemical Name	Water solubility classification	Water solubility	Water solubility temperature °C	Water solubility temperature °F
Sodium phosphate dibasic CAS#: 7558-79-4	Completely soluble	118000 mg/L	20 °C	68 °F
Phosphoric acid, potassium salt (1:1) CAS#: 7778-77-0	Soluble	> 1000 mg/L	25 °C	77 °F
2,4-Dinitrophenol CAS#: 51-28-5	Soluble	2790 mg/L	18 °C	64.4 °F

**Other adverse effects**

No information available.

**13. DISPOSAL CONSIDERATIONS**

Waste treatment methods

**Disposal of wastes**

Disposal should be in accordance with applicable regional, national, and local laws and regulations.

**Contaminated packaging**

Working in a well-ventilated area. Rinse three times with an appropriate solvent. Collect rinsate and dispose of according to local, state, or federal regulations. Dispose of empty container as normal trash. In the US, rinsate from empty containers is classified as hazardous waste and should be disposed of at an E.P.A. approved facility. Rinsate from empty containers may contain sufficient product to require disposal as hazardous waste in countries other than the US. Improper disposal or reuse of this container may be dangerous and illegal. Disposal should be in accordance with applicable regional, national, and local laws and regulations.

**US EPA Waste Number**

P048

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
2,4-Dinitrophenol	P048	Included in waste	-	-

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51-28-5		streams: F039, K001		
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Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
2,4-Dinitrophenol 51-28-5	-	P048	-	-

**Special instructions for disposal** Dilute to 3 to 5 times the volume with cold water. Open cold water tap completely, slowly pour the material to the drain. Allow cold water to run for 5 minutes to completely flush the system.

#### 14. TRANSPORT INFORMATION

**DOT** Not regulated  
**TDG** Not regulated  
**IATA** Not regulated  
**IMDG** Not regulated  
**Note:** No special precautions necessary.

#### Additional information

There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is not in a reagent set or kit, the classification given above applies. If the item is part of a reagent set or kit the classification would change to the following: UN3316 Chemical Kit, Hazard Class 9, Packing Group II or III. If the item is not regulated, the Chemical Kit classification does not apply.

#### 15. REGULATORY INFORMATION

##### National Inventories

**TSCA** Complies  
**DSL/NDSL** Complies

**TSCA-** United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL-** Canadian Domestic Substances List/Non-Domestic Substances List

##### International Inventories

**EINECS/ELINCS** Complies  
**ENCS** Complies  
**IECSC** Complies  
**KECL** Complies  
**PICCS** Complies  
**TCSI** Complies  
**AICS** Complies  
**NZIoC** Complies

**EINECS/ELINCS-** European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS-** Japan Existing and New Chemical Substances

**IECSC-** China Inventory of Existing Chemical Substances

**KECL-** Korean Existing and Evaluated Chemical Substances

**PICCS-** Philippines Inventory of Chemicals and Chemical Substances

**TCSI-** Taiwan Chemical Substances Inventory

**AICS-** Australian Inventory of Chemical Substances

**NZIoC-** New Zealand Inventory of Chemicals

##### US Federal Regulations

##### SARA 313

**Product Code(s)** 2227095  
**Issue Date** 08-Sep-2016  
**Version** 3

**Product Name** Buffer Powder Pillows pH 7.00 ± 0.02 @ 25°C  
**Revision Date** 29-Sep-2016  
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Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
2,4-Dinitrophenol (CAS #: 51-28-5)	1.0

**SARA 311/312 Hazard Categories**

<b>Acute health hazard</b>	Yes
<b>Chronic Health Hazard</b>	No
<b>Fire hazard</b>	No
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	No

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium phosphate dibasic 7558-79-4	5000 lb	-	-	X
2,4-Dinitrophenol 51-28-5	-	X	X	X

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Sodium phosphate dibasic 7558-79-4	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
2,4-Dinitrophenol 51-28-5	10 lb	-	RQ 10 lb final RQ RQ 4.54 kg final RQ

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Sodium phosphate dibasic 7558-79-4	X	X	X
2,4-Dinitrophenol 51-28-5	X	X	X

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

**NFPA and HMIS Classifications**



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<b>NFPA</b>	<b>Health hazards - 2</b>	<b>Flammability - 0</b>	<b>Instability - 0</b>	<b>Physical and Chemical Properties -</b>
<b>HMIS</b>	<b>Health hazards - 2</b>	<b>Flammability - 0</b>	<b>Physical hazards - 0</b>	<b>Personal protection - X</b> - See section 8 for more information

**Key or legend to abbreviations and acronyms used in the safety data sheet**

NIOSH IDLH *Immediately Dangerous to Life or Health*  
 ACGIH ACGIH (American Conference of Governmental Industrial Hygienists)  
 NDF *no data*

**Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
MAC	Maximum Allowable Concentration	Ceiling	Ceiling Limit Value
X	Listed	Vacated	These values have no official status. The only binding levels of contaminants are those listed in the final OSHA PEL. These lists are for reference purposes only. Please note that some reference state regulations of these "liberated" exposure limits in their state regulations.
SKN*	Skin designation	SKN+	Skin sensitization
RSP+	Respiratory sensitization	**	Hazard Designation
C	Carcinogen	R	Reproductive toxicant
M	mutagen		

**Prepared By** Hach Product Compliance Department

**Issue Date** 08-Sep-2016

**Revision Date** 29-Sep-2016

**Revision Note** None

**Disclaimer**

**USER RESPONSIBILITY:** Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

**THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.**

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**End of Safety Data Sheet**