



# SAFETY DATA SHEET

*Be Right™*

Issue Date 26-Apr-2016

Revision Date 16-Oct-2015

Version 1

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## 1. IDENTIFICATION

**Product identifier**

**Product Name** Buffer Solution pH 7.00 ± 0.02

**Other means of identification**

**Product Code(s)** 2283549

**Safety data sheet number** M00369

**Component of Kits or Sets** 51233; 251233K; 251235; 251235K; 251237; 251237K; 251238; 251238K; 251239; 251239K; 2687700; 2687900K; 2688600; 2688600K; 2828E; 2844700; 2852900; 2922600; 2922600K; 2922601; 2922601K; 2947600; 2947600K; 2953100; 2994000; 2994000K; 2994010; 2997100; 5170010; 5170011; 5172510; 5172511; 5172513; 5172514; 5465014K; 5465015SP; 5475010; 5475011; 5475011K; 5475012; 5475013; 5475014; 5475015; 5475015K; 5475046; 5475047; 5475048; 6846000; 6846200; 6846200X; 6846200X-1000; 6846300; 6846300K; 6857300; 6960100; 7818026; 8505250; 8505250K; 8505350; 8505350K; 8505450; 8505750; 8505800; 8505800K; 8505850; 8506000; 8506000K; 8506050; 8506200; 8506200K; 8506250; 8506400; 8506400K; 8506450; 8507100; 8507100K; 8507200; 8507200K; 8507450; 8507520; 8507520K; 8507530; 8507530K; 8507540; 8507540K; 8507550; 8507550K; 8507560; 8507560K; 8507570; 8507570K; 8508200; 8508300; 8508300K; 8508600; 8508600K; 8508700; 8508700K; 8509500; 8509500K; 8509700; 8509700K; 8510100; 8510100K; 8510200; 8510200K; 88-200

**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

**Product Information**

**Chemical Name** Not applicable

**Formula** Not applicable

**CAS No** Not applicable

**Alternate CAS Number** Not applicable

**NIOSH (RTECS) Number** None reported

## 2. HAZARDS IDENTIFICATION

**Classification**

**Regulatory Status**

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This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

**Hazards not otherwise classified (HNOC)**

Not applicable

**Label elements**

**Hazard statements**

EUH208 - May produce an allergic reaction

The product contains no substances which at their given concentration, are considered to be hazardous to health

**Other Information**

Not applicable

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Substance**

Not applicable

**Mixture**

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

Chemical Name	CAS No.	Weight-%	HMRIC #
Demineralized Water	7732-18-5	99.3076	-
Sodium Phosphate, Dibasic	7558-79-4	0.39	-
Potassium Phosphate, Monobasic	7778-77-0	0.27	-
Magnesium Nitrate	13446-18-9	0.0282	-
5-Chloro-2-methyl-2H-isothiazol-3-one	26172-55-4	0.0015	-
Magnesium Chloride	7786-30-3	0.0012	-
Tartrazine	1934-21-0	0.001	-
2-Methyl-2H-isothiazol-3-one	2682-20-4	0.0005	-

#### 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>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Skin contact</b>	Wash skin with soap and water.
<b>Inhalation</b>	Remove to fresh air.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water.
<b>Self-protection of the first aider</b>	Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

##### 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

Substance does not burn.

##### Specific hazards arising from the chemical

None reported.

##### Hazardous combustion products

No information available.

##### 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** Ensure adequate ventilation, especially in confined areas.

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

**Environmental precautions**

**Environmental precautions** Stop spilled material from being released to the environment. See Section 12 for additional ecological information.

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

**Methods for containment** Stop spilled material from being released to the environment.

**Methods for cleaning up** If permitted by regulation, absorb spilled liquid with non-reactive sorbent material. Place material in a plastic bag. Mark bag 'Non-hazardous trash', and dispose of as normal refuse. Otherwise, pick up spill for disposal and place in a closed container. 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** Handle in accordance with good industrial hygiene and safety practice. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Use only in well-ventilated areas.

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

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers.

**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.

**Appropriate engineering controls**

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems  
Ensure adequate ventilation, especially in confined areas

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

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**Eye/face protection** Wear safety glasses with side shields (or goggles).  
**Skin and body protection** Wear protective nitrile rubber gloves.  
**Respiratory protection** Ensure adequate ventilation, especially in confined areas. In case of insufficient ventilation, wear suitable respiratory equipment.  
**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

**Physical state** Liquid  
**Gas Under Pressure** Not classified according to GHS criteria  
**Appearance** aqueous solution      **Color** yellow  
**Odor** None      **Odor threshold** No data available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>Molecular weight</b>	No data available	
<b>pH</b>	7.3	
<b>Melting point/freezing point</b>	~ 0 °C / 32 °F	Estimation based on theoretical calculation
<b>Boiling point / boiling range</b>	~ 100 °C / 212 °F	Estimation based on theoretical calculation
<b>Evaporation rate</b>	1 (water = 1).	Estimation based on theoretical calculation
<b>Vapor pressure</b>	18.002 mm Hg / 2.4 kPa at 20 °C / 68 °F	Estimation based on theoretical calculation
<b>Vapor density (air = 1)</b>	0.62	
<b>Specific gravity (water = 1 / air = 1)</b>	1	Estimation based on theoretical calculation
<b>Partition Coefficient (n-octanol/water)</b>	Not applicable	
<b>Soil Organic Carbon-Water Partition Coefficient</b>	Not applicable	
<b>Autoignition temperature</b>	No data available	
<b>Decomposition temperature</b>	No data available	
<b>Dynamic viscosity</b>	~ 1 cP (mPa s) at 20 °C / 68 °F	
<b>Kinematic viscosity</b>	~ 1 cSt (mm <sup>2</sup> /s) at 20 °C / 68 °F	

### Solubility(ies)

**Water solubility**

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<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>	No data available
<b>Aluminum Corrosion Rate</b>	No data available
<b>Bulk density</b>	Not applicable
<b>Explosive properties</b>	Not classified according to GHS criteria.
<b>Explosion data</b>	No data available
<b>Upper explosion limit</b>	No data available
<b>Lower explosion limit</b>	No data available
<b>Flammable properties</b>	Not classified as flammable according to GHS criteria.
<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>	No data available
<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

#### **Chemical stability**

Stable under recommended storage conditions.

#### **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**

Heat. Evaporation.

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**Incompatible materials**

Strong oxidizing agents. Strong acids. Strong bases.

**Hazardous Decomposition Products**

None known based on information supplied.

**Explosive properties**

Not classified according to GHS criteria.

**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**

**Information on Likely Routes of Exposure**

<b>Product Information</b>	Product does not present an acute toxicity hazard based on known or supplied information.
<b>Inhalation</b>	No known effect based on information supplied.
<b>Eye contact</b>	No known effect based on information supplied.
<b>Skin contact</b>	No known effect based on information supplied.
<b>Ingestion</b>	No known effect based on information supplied.
<b>Aggravated Medical Conditions</b>	None known.
<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 (0 - 10%) CAS#: 7558-79-4	Phosphates are widely utilized by cells for metabolism of proteins, fats and carbohydrates.

**Acute Toxicity Information**

**Acute toxicity** Based on the classification principles the classification criteria are not met.

**STOT - single exposure** Based on the classification principles the classification criteria are not met.

**Aspiration hazard** Based on the classification principles the classification criteria are not met.

**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

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Inhalation (Gas) Exposure Route

No data available

Other Exposure Routes

No data available

**Ingredient Acute Toxicity Data**

**Oral Exposure Route**

Chemical Name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium Phosphate, Dibasic (0 - 10%) CAS#: 7558-79-4	Rat LD <sub>50</sub>	17000 mg/kg	None reported	None reported	RTECS (Registry of Toxic Effects of Chemical Substances)
Potassium Phosphate, Monobasic (0 - 10%) CAS#: 7778-77-0	Rat LD <sub>50</sub>	2820 mg/kg	None reported	None reported	HSDB (Hazardous Substances Data Bank)
Magnesium Nitrate (0 - 10%) CAS#: 13446-18-9	Rat LD <sub>50</sub>	5440 mg/kg	None reported	None reported	NIH (National Institutes of Health)
5-Chloro-2-methyl-2H-isothiazol-3-one (0 - 10%) CAS#: 26172-55-4	Rat LD <sub>50</sub>	481 mg/kg	None reported	None reported	IUCLID (The International Uniform Chemical Information Database)
Magnesium Chloride (0 - 10%) CAS#: 7786-30-3	Rat LD <sub>50</sub>	2800 mg/kg	None reported	None reported	Vendor SDS
Tartrazine (0 - 10%) CAS#: 1934-21-0	Mouse LD <sub>50</sub>	> 5000 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
Potassium Phosphate, Monobasic (0 - 10%) CAS#: 7778-77-0	Mouse LD <sub>50</sub>	1700 mg/kg	None reported	None reported	IUCLID (The International Uniform Chemical Information Database)
2-Methyl-2H-isothiazol-3-one (0 - 10%) CAS#: 2682-20-4	Rat LD <sub>50</sub>	> 2000 mg/kg	None reported	None reported	ECHA (The European Chemicals Agency)

**Dermal Exposure Route**

Chemical Name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Potassium Phosphate, Monobasic (0 - 10%) CAS#: 7778-77-0	Rabbit LD <sub>50</sub>	> 4640 mg/kg	None reported	None reported	ChemADVISOR
Chemical Name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
5-Chloro-2-methyl-2H-isothiazol-3-one (0 - 10%) CAS#: 26172-55-4	Rat LD <sub>50</sub>	> 1008 mg/kg	None reported	None reported	IUCLID (The International Uniform Chemical Information Database)

**Inhalation (Dust/Mist) Exposure Route**



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**Inhalation (Vapor) Exposure Route** No data available  
**Inhalation (Gas) Exposure Route** No data available  
**Other Exposure Routes** No data available

**Skin corrosion/irritation**

Based on the classification principles the classification criteria are not met.

**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 (0 - 10%) CAS#: 7558-79-4	Standard Draize Test	Rabbit	500 mg	24 hours	Skin irritant	RTECS (Registry of Toxic Effects of Chemical Substances)
Magnesium Nitrate (0 - 10%) CAS#: 13446-18-9	Standard Draize Test	Rabbit	500 mg	24 hours	Corrosive to skin	HSDB (Hazardous Substances Data Bank)
5-Chloro-2-methyl-2H-isothiazol-3-one (0 - 10%) CAS#: 26172-55-4	Organization for Economic Co-operation and Development (OECD) - Test 404: Acute Dermal Corrosion/Irritation	Rabbit	None reported	None reported	Corrosive to skin	OECD (Organization for Economic Co-operation and Development)

**Serious eye damage/eye irritation**

Based on the classification principles the classification criteria are not met.

**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 (0 - 10%) CAS#: 7558-79-4	Standard Draize Test	Rabbit	500 mg	24 hours	Eye irritant	RTECS (Registry of Toxic Effects of Chemical Substances)
Magnesium Nitrate (0 - 10%) CAS#: 13446-18-9	Standard Draize Test	Rabbit	500 mg	24 hours	<b>Data Source</b>	HSDB (Hazardous Substances Data Bank)
5-Chloro-2-methyl-2H-isothiazol-3-one (0 - 10%) CAS#: 26172-55-4	Organization for Economic Co-operation and Development (OECD) - Test 405: Acute Eye Corrosion/Irritation	Rabbit	None reported	None reported	Eye irritant	ERMA (New Zealand's Environmental Risk Management Authority) OECD (Organization for Economic Co-operation and

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### Sensitization Information

**Sensitization** Based on the classification principles the classification criteria are not met.

### Product Sensitization Data

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

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

### Ingredient Sensitization Data

#### Skin Sensitization Exposure Route

Chemical Name	Test method	Species	Results	Key literature references and sources for data
5-Chloro-2-methyl-2H -isothiazol-3-one (0 - 10%) CAS#: 26172-55-4	OECD Test No. 406: Skin Sensitization	Guinea pig	Confirmed to be a skin sensitizer	IUCLID (The International Uniform Chemical Information Database)

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

### Chronic Toxicity Information

**Chronic toxicity** No known effect based on information supplied.

**STOT - repeated exposure** Based on the classification principles the classification criteria are not met.

### Product Repeat Dose 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.

**Other Exposure Routes** No data available.

### Ingredient Repeat Dose 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

**Other Exposure Routes** No data available

### Carcinogenicity

Based on the classification principles the classification criteria are not met.

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Chemical Name	ACGIH	IARC	NTP	OSHA
Magnesium Nitrate 13446-18-9	-	Group 2A	-	X

**Legend**

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

**Other Exposure Routes** No data available

**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

**Other Exposure Routes** No data available

**Germ cell mutagenicity**

Based on the classification principles the classification criteria are not met.

**Product Germ Cell Mutagenicity *in vitro* Data**

No data available.

**Ingredient Germ Cell Mutagenicity *in vitro* Data**

Toxicological data for ingredients is not indicative of likely harm.

**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

**Other Exposure Routes** No data available

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**Ingredient Germ Cell Mutagenicity *in vivo* Data**

<b>Oral Exposure Route</b>	No data available
<b>Dermal Exposure Route</b>	No data available
<b>Inhalation (Dust/Mist) Exposure Route</b>	No data available
<b>Inhalation (Vapor) Exposure Route</b>	No data available
<b>Inhalation (Gas) Exposure Route</b>	No data available
<b>Other Exposure Routes</b>	No data available

**Reproductive toxicity**

Based on the classification principles the classification criteria are not met.

<b>Oral Exposure Route</b>	No data available
<b>Dermal Exposure Route</b>	No data available
<b>Inhalation (Dust/Mist) Exposure Route</b>	No data available
<b>Inhalation (Vapor) Exposure Route</b>	No data available
<b>Inhalation (Gas) Exposure Route</b>	No data available
<b>Other Exposure Routes</b>	No data available

**Ingredient Reproductive Toxicity Data**

<b>Oral Exposure Route</b>	No data available
<b>Dermal Exposure Route</b>	No data available
<b>Inhalation (Dust/Mist) Exposure Route</b>	No data available
<b>Inhalation (Vapor) Exposure Route</b>	No data available
<b>Inhalation (Gas) Exposure Route</b>	No data available
<b>Other Exposure Routes</b>	No data available

**12. ECOLOGICAL INFORMATION**

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

**Product Ecological Data**

**Aquatic toxicity**

<b>Fish</b>	No data available
<b>Crustacea</b>	No data available
<b>Algae</b>	No data available
<b>Other Aquatic Species</b>	No data available

**Terrestrial toxicity**

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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
Magnesium Nitrate (0 - 10%) CAS#: 13446-18-9	96 hours	<i>Lepomis macrochirus</i>	LC <sub>50</sub>	9000 mg/L	ECHA (The European Chemicals Agency)
5-Chloro-2-methyl-2H-isothiazol-3-one (0 - 10%) CAS#: 26172-55-4	96 hours	<i>Oncorhynchus mykiss</i>	LC <sub>50</sub>	0.19 mg/L	EPA (United States Environmental Protection Agency)
Magnesium Chloride (0 - 10%) CAS#: 7786-30-3	96 hours	None reported	LC <sub>50</sub>	480 mg/L	Vendor SDS
2-Methyl-2H-isothiazol-3-one (0 - 10%) CAS#: 2682-20-4	96 hours	<i>Oncorhynchus mykiss</i>	LC <sub>50</sub>	0.7 mg/L	EPA (United States Environmental Protection Agency)
Chemical Name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Magnesium Nitrate (0 - 10%) CAS#: 13446-18-9	96 hours	<i>Primephales promelas</i>	LC <sub>50</sub>	2120 mg/L	ECHA (The European Chemicals Agency)
Magnesium Chloride (0 - 10%) CAS#: 7786-30-3	48 hours	<i>Leuciscus idus</i>	LC <sub>50</sub>	7700 mg/L	Vendor SDS
Chemical Name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Magnesium Nitrate (0 - 10%) CAS#: 13446-18-9	96 hours	<i>Gambusia affinis</i>	LC <sub>50</sub>	6650 mg/L	ECHA (The European Chemicals Agency)
Chemical Name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Magnesium Nitrate (0 - 10%) CAS#: 13446-18-9	96 hours	<i>Oncorhynchus mykiss</i>	LC <sub>50</sub>	1685 mg/L	ECHA (The European Chemicals Agency)

**Crustacea**

Chemical Name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Magnesium Nitrate (0 - 10%) CAS#: 13446-18-9	48 Hours	<i>Daphnia magna</i>	EC <sub>50</sub>	880 mg/L	ECHA (The European Chemicals Agency)
5-Chloro-2-methyl-2H-isothiazol-3-one (0 - 10%) CAS#: 26172-55-4	48 Hours	None reported	LC <sub>50</sub>	0.56 mg/L	EPA (United States Environmental Protection Agency)
Magnesium Chloride (0 - 10%) CAS#: 7786-30-3	48 Hours	<i>Daphnia magna</i>	EC <sub>50</sub>	140 mg/L	Vendor SDS
2-Methyl-2H-isothiazol-3-one	48 Hours	<i>Daphnia magna</i>	EC <sub>50</sub>	0.18 mg/L	EPA (United States Environmental Protection Agency)

(0 - 10%) CAS#: 2682-20-4					Agency)
Chemical Name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Magnesium Chloride (0 - 10%) CAS#: 7786-30-3	24 hours	<i>Daphnia magna</i>	EC <sub>50</sub>	3190 mg/L	Vendor SDS

**Algae**

Chemical Name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Magnesium Nitrate (0 - 10%) CAS#: 13446-18-9	72 Hours	<i>Scenedesmus subspicatus</i>	EC <sub>50</sub>	> 100 mg/L	ECHA (The European Chemicals Agency)
5-Chloro-2-methyl-2H-isothiazol-3-one (0 - 10%) CAS#: 26172-55-4	72 Hours	None reported	EC <sub>50</sub>	0.021 mg/L	EPA (United States Environmental Protection Agency)
Magnesium Chloride (0 - 10%) CAS#: 7786-30-3	72 Hours	<i>Desmodesmus subspicatus</i>	EC <sub>50</sub>	2200 mg/L	Vendor SDS

**Other Aquatic Species**

No data available

**Terrestrial toxicity**

**Soil**

No data available

**Vertebrates**

No data available

**Invertebrates**

No data available

**Other Information**

**Persistence and degradability**

None known.

**Product Biodegradability Data**

No data available.

**Ingredient Biodegradability Data**

No data available

**Bioaccumulation**

None known.

**Product Bioaccumulation Data**

Test data reported below.

**Ingredient Bioaccumulation Data**

No data available

**Additional information**

**Product Information**

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

Not applicable

**Ingredient Information**

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Chemical Name	Partition Coefficient (n-octanol/water)	Method
Tartrazine (0 - 10%) CAS#: 1934-21-0	log K <sub>ow</sub> = -10.17	Estimation through KOWWIN v1.68 part of the Estimation Programs Interface (EPI) Suite™

**Mobility**

Mobility in soil: High mobility. If available, see ingredient data below.

**Product Information**

Soil Organic Carbon-Water Partition Coefficient Not applicable

Ingredient Information No data 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 (0 - 10%) CAS#: 7558-79-4	Completely soluble	118000 mg/L	20 °C	68 °F
Potassium Phosphate, Monobasic (0 - 10%) CAS#: 7778-77-0	Soluble	> 1000 mg/L	25 °C	77 °F
Magnesium Nitrate (0 - 10%) CAS#: 13446-18-9	Completely soluble	420000 mg/L	20 °C	68 °F
Magnesium Chloride (0 - 10%) CAS#: 7786-30-3	Completely soluble	5425000 mg/L	20 °C	68 °F
Tartrazine (0 - 10%) CAS#: 1934-21-0	Completely soluble	200000 mg/L	25 °C	77 °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

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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.

**Special instructions for disposal**

If permitted by regulation, Open cold water tap completely, slowly pour the material to the drain. Otherwise, Check with local municipal and state authorities and waste contractors for pertinent local information regarding the proper disposal of chemicals.

**14. TRANSPORT INFORMATION**

<u>DOT</u>	Not regulated
<u>TDG</u>	Not regulated
<u>IATA</u>	Not regulated
<u>IMDG</u>	Not regulated

**15. REGULATORY INFORMATION**

**International Inventories**

TSCA	Does not comply
DSL/NDSL	Complies
EINECS/ELINCS	Does not comply
ENCS	Does not comply
IECSC	Complies
KECL	Does not comply
PICCS	Complies
AICS	Complies

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

**US Federal Regulations**

**SARA 313**

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

**SARA 311/312 Hazard Categories**

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	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)



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Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium Phosphate, Dibasic 7558-79-4	5000 lb	-	-	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

**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
Magnesium Nitrate 13446-18-9	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**

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

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

\* = Chronic Health Hazard

NDF no data

TWA (time-weighted average)

STEL (Short Term Exposure Limit)

Ceiling - Maximum limit value

Vacated - These values have no official status. The only enforceable contaminant levels are those listed as OSHA Final PELs. These lists are provided as reference only. Please note that some state regulations reference these "vacated" exposure limits in their state regulations.

Prepared By Hach Product Compliance Department

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**Revision Note** None  
New SDS

**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**