



Be Right™

# SAFETY DATA SHEET

Issue Date 20-May-2016

Revision Date 31-Aug-2016

Version 2

Page 1 / 18

## 1. IDENTIFICATION

### Product identifier

**Product Name** NitriVer ® 3 Nitrite Reagent

### Other means of identification

**Product Code(s)**

2107169

**Safety data sheet number**

M00055

**Component of Kits or Sets**

2107169Q; 2429800; 2507800; 2508300; 2508400; 251231; 251231K; 251232; 251232K; 251233; 251233K; 251234; 251234K; 251235; 251235K; 251236; 251236K; 251237; 251237K; 251239; 251239K; 251242; 251242K; 2590100; 2687900K; 2688800; 2688800K; 2689400; 2689800; 2690000; 2690200; 2690400; 2690600; 2690800; 2691100; 2691700; 2882200; 2882200RGT; 2922400; 2922400K; 2922401; 2922401K; 2922600; 2922600K; 2922601; 2922601K; 2923200

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

**Recommended Use** Laboratory reagent. Determination of nitrite.

**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**

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

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Skin sensitization	Category 1

**Product Code(s)** 2107169  
**Issue Date** 20-May-2016  
**Version** 2

**Product Name** NitriVer © 3 Nitrite Reagent  
**Revision Date** 31-Aug-2016  
**Page** 2 / 18

**Hazards not otherwise classified (HNOC)**

Not applicable

**Label elements**

**Signal word** - Warning



**Hazard statements**

H302 - Harmful if swallowed  
H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H317 - May cause an allergic skin reaction

**Precautionary statements**

P264 - Wash face, hands and any exposed skin thoroughly after handling  
P270 - Do not eat, drink or smoke when using this product  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray  
P272 - Contaminated work clothing should not be allowed out of the workplace  
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  
P362 - Take off contaminated clothing and wash before reuse  
P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention  
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
P330 - Rinse mouth  
P501 - Dispose of contents/ container to an approved waste disposal plant

**Other Information**

Not applicable

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Substance**

**Mixture**

**Chemical Family** Mixture.

Percent ranges are used where confidential product information is applicable.

Chemical Name	CAS No	Percent Range	HMRIC #
Phosphoric acid, potassium salt (1:1)	7778-77-0	50 - 100	-
Potassium pyrosulfate	7790-62-7	5 - 10	-
Benzenesulfonic acid, 4-amino-, monosodium salt	515-74-2	5 - 10	-
2,7-Naphthalenedisulfonic acid, 4,5-dihydroxy-, disodium salt	129-96-4	1 - 5	-

Glycine, N,N-1,2-cyclohexanediybis[N-(carboxymethyl)-, trisodium salt	36679-96-6	1 - 5	-
---	------------	-------	---

#### 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, this product decomposes to form toxic gases.

##### 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

<b>U.S. Notice</b>	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.
<b>EC Notice</b>	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.

**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 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.

**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**

Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

**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> white
<b>Odor</b> Odorless	<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>	3.2	5% Solution
<b>Melting point/freezing point</b>	224 °C / 435 °F	
<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>	3.12	
<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	

**Product Code(s)** 2107169  
**Issue Date** 20-May-2016  
**Version** 2

**Product Name** NitriVer® 3 Nitrite Reagent  
**Revision Date** 31-Aug-2016  
**Page** 6 / 18

### 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>	1.45 mm/yr / 0.06 in/yr
<b>Aluminum Corrosion Rate</b>	
<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>	No data available
<b>Upper explosion limit</b>	No data available
<b>Lower explosion limit</b>	No data available
<b>Flammable properties</b>	During a fire, this product decomposes to form toxic gases.
<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 propeties</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 propeties

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.

### Special dangers of the product

**Product Code(s)** 2107169  
**Issue Date** 20-May-2016  
**Version** 2

**Product Name** NitriVer® 3 Nitrite Reagent  
**Revision Date** 31-Aug-2016  
**Page** 7 / 18

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. Carbon dioxide. Carbon monoxide. sodium oxides.

**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>	Causes skin irritation. Harmful if swallowed. Causes serious eye irritation. Skin sensitizer.
<b>Inhalation</b>	No known effect based on information supplied.
<b>Eye contact</b>	Severely irritating to eyes.
<b>Skin contact</b>	Causes skin irritation. May cause sensitization by skin contact.
<b>Ingestion</b>	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>
Benzenesulfonic acid, 4-amino-, monosodium salt (5 - 10) CAS#: 515-74-2	Sulfanilic acid is actively transported from the blood of rats and guinea-pigs into mucosa cells of the small intestine, partly metabolized, and then secreted into the lumen of the small intestine.

**Product Acute Toxicity Data**

Product Code(s) 2107169  
 Issue Date 20-May-2016  
 Version 2

Product Name NitriVer © 3 Nitrite Reagent  
 Revision Date 31-Aug-2016  
 Page 8 / 18

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)	622.00 mg/kg
---------------	--------------

**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) (50 - 100) CAS#: 7778-77-0	Rat LD <sub>50</sub>	2820 mg/kg	None reported	None reported	HSDB (Hazardous Substances Data Bank)
Potassium pyrosulfate (5 - 10) CAS#: 7790-62-7	Rat LD <sub>50</sub>	2340 mg/kg	None reported	None reported	Vendor SDS
Benzenesulfonic acid, 4-amino-, monosodium salt (5 - 10) CAS#: 515-74-2	Rat LD <sub>50</sub>	12300 mg/kg	None reported	None reported	IUCLID (The International Uniform Chemical Information Database)
2,7-Naphthalenedisulfonic acid, 4,5-dihydroxy-, disodium salt (1 - 5) CAS#: 129-96-4	Rat LD <sub>50</sub>	> 5000 mg/kg	None reported	None reported	Vendor SDS
Chemical Name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Phosphoric acid, potassium salt (1:1) (50 - 100) CAS#: 7778-77-0	Mouse LD <sub>50</sub>	1700 mg/kg	None reported	None reported	IUCLID (The International Uniform Chemical Information Database)

**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) (50 - 100) CAS#: 7778-77-0	Rabbit LD <sub>50</sub>	> 4640 mg/kg	None reported	None reported	ChemADVISOR

Inhalation (Dust/Mist) Exposure Route No data available  
 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
Benzenesulfonic acid, 4-amino-, monosodium salt (5 - 10) CAS#: 515-74-2	Patch test	Rabbit	None reported	None reported	Skin irritant	No information available
2,7-Naphthalenedisulfonic acid, 4,5-dihydroxy-, disodium salt (1 - 5) CAS#: 129-96-4	Existing human experience	Human	None reported	None reported	Skin irritant	No information available
Chemical Name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Benzenesulfonic acid, 4-amino-, monosodium salt (5 - 10) CAS#: 515-74-2	Patch test	Rabbit	500 mg	4 hours	Not corrosive or irritating to skin	ECHA (The European Chemicals Agency)

**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
2,7-Naphthalenedisulfonic acid, 4,5-dihydroxy-, disodium salt (1 - 5) CAS#: 129-96-4	Existing human experience	Human	None reported	None reported	Eye irritant	No information available
Chemical Name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Benzenesulfonic acid, 4-amino-, monosodium salt (5 - 10) CAS#: 515-74-2	Organization for Economic Co-operation and Development (OECD) - Test 405: Acute Eye Corrosion/Irritation	Rabbit	41 mg	24 hours	Mild eye irritant	ECHA (The European Chemicals Agency)

**Sensitization Information**

**Product Sensitization Data**

**Skin Sensitization Exposure Route**

No data available.

Product Code(s) 2107169  
 Issue Date 20-May-2016  
 Version 2

Product Name NitriVer © 3 Nitrite Reagent  
 Revision Date 31-Aug-2016  
 Page 10 / 18

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
Benzenesulfonic acid, 4-amino-, monosodium salt (5 - 10) CAS#: 515-74-2	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**

**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.

**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

Chemical Name	CAS No	ACGIH	IARC	NTP	OSHA
Phosphoric acid, potassium salt (1:1)	7778-77-0	-	-	-	-
Potassium pyrosulfate	7790-62-7	-	-	-	-
Benzenesulfonic acid, 4-amino-, monosodium salt	515-74-2	-	-	-	-
2,7-Naphthalenedisulfonic acid, 4,5-dihydroxy-, disodium salt	129-96-4	-	-	-	-
Glycine, N,N-1,2-cyclohexanedilybis[N-(carboxymethyl)-, trisodium salt	36679-96-6	-	-	-	-

**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

Product Code(s) 2107169  
 Issue Date 20-May-2016  
 Version 2

Product Name NitriVer © 3 Nitrite Reagent  
 Revision Date 31-Aug-2016  
 Page 11 / 18

<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

**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**

Chemical Name	Test	Cell Strain	Reported dose	Exposure time	Results	Key literature references and sources for data
Benzenesulfonic acid, 4-amino-, monosodium salt (5 - 10) CAS#: 515-74-2	Mutation in microorganisms	<i>Salmonella typhimurium</i>	None reported	None reported	Negative test result for mutagenicity	IUCLID (The International Uniform Chemical Information Database)

**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** No data available

**Dermal Exposure Route** No data available

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

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

**Product Code(s)** 2107169  
**Issue Date** 20-May-2016  
**Version** 2

**Product Name** NitriVer © 3 Nitrite Reagent  
**Revision Date** 31-Aug-2016  
**Page** 12 / 18

**Inhalation (Gas) Exposure Route** 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

**Ingredient Reproductive 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

**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
Potassium pyrosulfate (5 - 10) CAS#: 7790-62-7	96 hours	<i>Oncorhynchus mykiss</i>	LC <sub>50</sub>	420 mg/L	ERMA (New Zealand's Environmental Risk Management Authority)
Benzenesulfonic acid, 4-amino-, monosodium salt	96 hours	<i>Pimephales promelas</i>	LC <sub>50</sub>	100 mg/L	IUCLID (The International Uniform Chemical Information Database)

**Product Code(s)** 2107169  
**Issue Date** 20-May-2016  
**Version** 2

**Product Name** NitriVer © 3 Nitrite Reagent  
**Revision Date** 31-Aug-2016  
**Page** 13 / 18

(5 - 10) CAS#: 515-74-2					
Glycine, N,N-1,2-cyclohexane diylbis[N-(carboxymet hyl)-, trisodium salt (1 - 5) CAS#: 36679-96-6	96 hours	None reported	LC <sub>50</sub>	356000 mg/L	Estimation through ECOSARS v1.11 part of the Estimation Programs Interface (EPI) Suite™

#### Crustacea

Chemical Name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Potassium pyrosulfate (5 - 10) CAS#: 7790-62-7	48 Hours	<i>Daphnia magna</i>	EC <sub>50</sub>	140 mg/L	ERMA (New Zealand's Environmental Risk Management Authority)
Benzenesulfonic acid, 4-amino-, monosodium salt (5 - 10) CAS#: 515-74-2	48 Hours	<i>Daphnia magna</i>	EC <sub>50</sub>	86 mg/L	IUCLID (The International Uniform Chemical Information Database)
Glycine, N,N-1,2-cyclohexane diylbis[N-(carboxymet hyl)-, trisodium salt (1 - 5) CAS#: 36679-96-6	48 Hours	None reported	EC <sub>50</sub>	26162 mg/L	Estimation through ECOSARS v1.11 part of the Estimation Programs Interface (EPI) Suite™

#### Algae

Chemical Name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Benzenesulfonic acid, 4-amino-, monosodium salt (5 - 10) CAS#: 515-74-2	72 Hours	<i>Scenedesmus subspicatus</i>	EC <sub>50</sub>	375 mg/L	IUCLID (The International Uniform Chemical Information Database)
Glycine, N,N-1,2-cyclohexane diylbis[N-(carboxymet hyl)-, trisodium salt (1 - 5) CAS#: 36679-96-6	96 hours	None reported	EC <sub>50</sub>	56103 mg/L	Estimation through ECOSARS v1.11 part of the Estimation Programs Interface (EPI) Suite™

#### Terrestrial toxicity

**Soil** No data available

**Vertebrates** No data available

**Invertebrates** No data available

#### Other Information

#### Persistence and degradability

None known.

#### Product Biodegradability Data

If available, see ingredient data below.

**Ingredient Biodegradability Data**

Test data reported below

Chemical Name	Test method	Biodegradation	Exposure time	Results
Benzenesulfonic acid, 4-amino-, monosodium salt (5 - 10) CAS#: 515-74-2	OECD Test No. 301D: Ready Biodegradability: Closed Bottle Test (TG 301 D)	97%	28 days	Readily biodegradable
Glycine, N,N-1,2-cyclohexane diylbis[N-(carboxymethyl)-, trisodium salt (1 - 5) CAS#: 36679-96-6	None reported	None reported	None reported	Not readily biodegradable

**Bioaccumulation**

None known.

**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**

Chemical Name	Partition Coefficient (n-octanol/water)	Method
Benzenesulfonic acid, 4-amino-, monosodium salt (5 - 10) CAS#: 515-74-2	log K <sub>ow</sub> = -3.87	Estimation through KOWWIN v1.68 part of the Estimation Programs Interface (EPI) Suite™
2,7-Naphthalenedisulfonic acid, 4,5-dihydroxy-, disodium salt (1 - 5) CAS#: 129-96-4	log K <sub>ow</sub> = -1.87	Estimation through KOWWIN v1.68 part of the Estimation Programs Interface (EPI) Suite™
Glycine, N,N-1,2-cyclohexanedylbis[N-(carboxymethyl)-, trisodium salt (1 - 5) CAS#: 36679-96-6	log K <sub>ow</sub> = -11	Estimation through KOWWIN v1.68 part of the Estimation Programs Interface (EPI) Suite™

**Mobility**

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
---------------	---	--------

Benzenesulfonic acid, 4-amino-, monosodium salt (5 - 10) CAS#: 515-74-2	log K <sub>oc</sub> = 0.68	Estimation through KOCWIN v2.00 part of the Estimation Programs Interface (EPI) Suite™
Glycine, N,N-1,2-cyclohexanediylbis[N-(carboxymethyl)-, trisodium salt (1 - 5) CAS#: 36679-96-6	log K <sub>oc</sub> = 2.24	Estimation through KOCWIN v2.00 part of the Estimation Programs Interface (EPI) Suite™

**Additional information**

**Water solubility**

**Product Information**

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

**Ingredient Information**

<u>Chemical Name</u>	<u>Water solubility classification</u>	<u>Water solubility</u>	<u>Water solubility temperature °C</u>	<u>Water solubility temperature °F</u>
Phosphoric acid, potassium salt (1:1) (50 - 100) CAS#: 7778-77-0	Soluble	> 1000 mg/L	25 °C	77 °F
Potassium pyrosulfate (5 - 10) CAS#: 7790-62-7	Completely soluble	25000 mg/L	20 °C	68 °F
Benzenesulfonic acid, 4-amino-, monosodium salt (5 - 10) CAS#: 515-74-2	Completely soluble	> 20000 mg/L	20 °C	68 °F
2,7-Naphthalenedisulfonic acid, 4,5-dihydroxy-, disodium salt (1 - 5) CAS#: 129-96-4	Soluble	> 1000 mg/L	25 °C	77 °F
Glycine, N,N-1,2-cyclohexanediylbis[N-(carboxymethyl)-, trisodium salt (1 - 5) CAS#: 36679-96-6	Soluble	> 1000 mg/L	50 °C	122 °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.

**Product Code(s)** 2107169  
**Issue Date** 20-May-2016  
**Version** 2

**Product Name** NitriVer® 3 Nitrite Reagent  
**Revision Date** 31-Aug-2016  
**Page** 16 / 18

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

**Special instructions for disposal** If permitted by regulation. Dilute material with excess water making a weaker than 5% solution. Adjust to a pH between 6 and 9 with an alkali, such as soda ash or sodium bicarbonate. Open cold water tap completely, slowly pour the reacted material to the drain. Check with national, local municipal and state authorities and waste contractors for pertinent local information on the disposal of this article.

#### 14. TRANSPORT INFORMATION

<b>DOT</b>	Not regulated
<b>TDG</b>	Not regulated
<b>IATA</b>	Not regulated
<b>IMDG</b>	Not regulated
<b>Note:</b>	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

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies

**TSCA**- United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL**- Canadian Domestic Substances List/Non-Domestic Substances List

##### International Inventories

<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Does not comply
<b>TCSI</b>	Complies
<b>AICS</b>	Does not comply
<b>NZIoC</b>	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)** 2107169  
**Issue Date** 20-May-2016  
**Version** 2

**Product Name** NitriVer® 3 Nitrite Reagent  
**Revision Date** 31-Aug-2016  
**Page** 17 / 18

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**

<b>Acute health hazard</b>	No
<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)

**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

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals

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

**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**

<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**

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

**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

**Product Code(s)** 2107169  
**Issue Date** 20-May-2016  
**Version** 2

**Product Name** NitriVer® 3 Nitrite Reagent  
**Revision Date** 31-Aug-2016  
**Page** 18 / 18

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** 20-May-2016

**Revision Date** 31-Aug-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.**

**HACH COMPANY©2015**

**End of Safety Data Sheet**