



Be Right™

# SAFETY DATA SHEET

Issue Date 30-Aug-2016

Revision Date 24-Jan-2018

Version 2

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## Section 1: PRODUCT AND COMPANY IDENTIFICATION

### Product identifier

**Product Code(s)** 1407899-AR  
**Product Name** NitriVer® 3 Nitrite Reagent

### Other means of identification

**Safety data sheet number** M00055

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

**Recommended Use** Laboratory reagent. Determination of nitrite.  
**Restrictions on use** None.  
**Uses advised against** None

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

#### **Supplier Address**

Hexis Cientifica Ltda CNPJ: 53.276.010 / 00001-10 Av. Antonieta Piva Barranqueiros, 385 - Industrial District - Jundiai - SP -  
Phone: 11 4589-2672

#### **Manufacturer Address**

Hach Company P.O. Box 389 Loveland, CO 80539 USA +1(970) 669-3050

### Emergency telephone number

#### **Argentina**

+(54)-1159839431

#### **Costa Rica**

Costa Rica National Poison Center: +506-2223-1028

#### **United States of America**

+1(303) 623-5716 - 24 Hour Service +1(515)232-2533 - 8am - 4pm CST

## Section 2: HAZARDS IDENTIFICATION

### **GHS Classification**

#### **Most Important Hazards**

According to ABNT NBR 14725-2

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

### **Label elements**



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**Signal word - Danger**

**Hazard statements**

H302 - Harmful if swallowed  
H317 - May cause an allergic skin reaction  
H318 - Causes serious eye damage

**Precautionary statements**

P270 - Do not eat, drink or smoke when using this product  
P260 - Do not breathe dust/fume/gas/mist/vapors/spray  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting  
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower  
P363 - Wash contaminated clothing before reuse  
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing  
P405 - Store locked up  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P310 - Immediately call a POISON CENTER or doctor  
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray  
P272 - Contaminated work clothing should not be allowed out of the workplace  
P302 + P352 - IF ON SKIN: Wash with plenty of water and soap  
P362 + P364 - Take off all contaminated clothing and wash it before reuse  
P501 - Dispose of contents/ container to an approved waste disposal plant

**Other Hazards Known**

**Section 3: COMPOSITION/INFORMATION ON INGREDIENTS**

**Substance**

Not applicable

**Mixture**

**Raw Material/Pure Substance** Mixture

**Chemical Name** Not applicable  
**Chemical Family** Mixture

**CAS No** Not applicable

**Chemical nature** Mixture of organic compounds.

Chemical name	CAS No.	Percent Range
Phosphoric acid, potassium salt (1:1)	7778-77-0	70 - 80%
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-cyclohexanediylbis[N-(carboxymethyl)-, trisodium salt	36679-96-6	1 - 5%

**Section 4: FIRST AID MEASURES**

**Description of necessary first aid measures**

**General advice** Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

**Inhalation** Remove to fresh air. Get medical attention immediately if symptoms occur.

**Skin contact** Wash off immediately with soap and plenty of water for at least 15 minutes. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.

**Eye contact** Get immediate medical advice/attention. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area.

**Ingestion** Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician.

**For emergency responders**

**Self-protection of the first aider** Avoid contact with skin, eyes or clothing.

**Most important symptoms/effects, acute and delayed**

**Symptoms** Burning sensation. Itching. Rashes. Hives.

**Indication of immediate medical attention and special treatment needed, if necessary**

**Note to physicians** May cause sensitization in susceptible persons. Treat symptomatically.

## Section 5: FIRE FIGHTING MEASURES

**Suitable Extinguishing Media**

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** No information available

**Specific hazards arising from the chemical**

**Specific hazards arising from the chemical** Product is or contains a sensitizer. May cause sensitization by skin contact.

**Flammable properties**

During a fire, this product decomposes to form toxic gases.

**Explosive properties**

Not classified according to GHS criteria.

**Specific/special fire-fighting measures**

**Specific/special fire-fighting measures** No information available.

**Special protective equipment and precautions for fire-fighters**

**Special protective equipment for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

## Section 6: ACCIDENTAL RELEASE MEASURES

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

**Personal precautions** Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Ensure adequate ventilation. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

**For emergency responders** Use personal protective equipment as required.

**Environmental precautions**

**Environmental precautions** Prevent further leakage or spillage if safe to do so.

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

**Methods for containment** Prevent further leakage or spillage if safe to do so.

<b>Methods for cleaning up</b>	Pick up and transfer to properly labeled containers.
<b>Prevention of secondary hazards</b>	Clean contaminated objects and areas thoroughly observing environmental regulations.
<b>Other Information</b>	Refer to protective measures listed in Sections 7 and 8.
<b>Reference to other sections</b>	See section 8 for more information. See section 13 for more information.

## Section 7: HANDLING AND STORAGE

### Preventive measures for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Take off contaminated clothing and wash before reuse.

### Precautions for safe handling

**General Hygiene Considerations** Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store locked up.

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

## Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**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

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**Hand Protection** Wear suitable gloves.

**Eye/face protection** Tight sealing safety goggles.

**Skin and body protection** Wear suitable protective clothing.

**General Hygiene Considerations** Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

**Environmental exposure controls** Local authorities should be advised if significant spillages cannot be contained. Do not allow into any sewer, on the ground or into any body of water.

**Thermal hazards** None under normal processing.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

Physical state Solid  
 Appearance powder  
 Odor Odorless  
 Color white  
 Odor threshold No data available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Molecular weight	No data available	
pH	3.2	5% Solution
Melting point/freezing point	224 °C / 435 °F	
Boiling point / boiling range	No data available	
Evaporation rate	Not applicable	
Vapor pressure	Not applicable	
Vapor density (air = 1)	Not applicable	
Specific gravity (water = 1 / air = 1)	3.12	
Partition Coefficient (n-octanol/water)	log K <sub>ow</sub> ~ -0.33	
Soil Organic Carbon-Water Partition Coefficient	log K <sub>oc</sub> ~ 0.06	
Autoignition temperature	No data available	
Decomposition temperature	No data available	
Dynamic viscosity	Not applicable	
Kinematic viscosity	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

#### Metal Corrosivity

Steel Corrosion Rate 1.45 mm/yr / 0.06 in/yr  
 Aluminum Corrosion Rate

#### Volatile Organic Compounds (VOC) Content

Not applicable

Chemical name	CAS No.	Volatile organic compounds (VOC) content	CAA (Clean Air Act)
Phosphoric acid, potassium salt (1:1)	7778-77-0	No data available	-
Potassium pyrosulfate	7790-62-7	No data available	-
Benzenesulfonic acid, 4-amino-, monosodium salt	515-74-2	No data available	-
2,7-Naphthalenedisulfonic acid, 4,5-dihydroxy-, disodium salt	129-96-4	No data available	-
Glycine, N,N-1,2-cyclohexanediybis[N-(carboxymethyl)-, trisodium salt	36679-96-6	No data available	-

#### Explosive properties

Upper explosion limit No data available  
Lower explosion limit No data available

#### Flammable properties

Flash point Not applicable  
Method No information available

#### Flammability Limit in Air

Upper flammability limit: No data available  
Lower flammability limit: No data available

#### Oxidizing properties

No data available.

#### Bulk density

No data available

#### Particle Size

No information available

#### Particle Size Distribution

No information available

## Section 10: STABILITY AND REACTIVITY

#### Reactivity

Not applicable.

#### Chemical stability

Stability Stable under normal conditions.

#### Explosion data

Sensitivity to Mechanical Impact None  
Sensitivity to Static Discharge None.

#### Possibility of Hazardous Reactions

Possibility of Hazardous Reactions None under normal processing.

#### Hazardous polymerization

None under normal processing.

#### Conditions to avoid

Conditions to avoid None known based on information supplied.

#### Incompatible materials

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

**Hazardous Decomposition Products**

Phosphorus oxides. Carbon dioxide. Carbon monoxide. Sodium oxides.

**Section 11: TOXICOLOGICAL INFORMATION**

**Information on Likely Routes of Exposure**

**Product Information**

- Inhalation** No known effect based on information supplied.
- Eye contact** Severely irritating to eyes. Causes serious eye damage. May cause burns. May cause irreversible damage to eyes.
- Skin contact** May cause irritation. May cause sensitization by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.
- Ingestion** Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if swallowed.

**Symptoms** Redness. Burning. May cause blindness. Itching. Rashes. Hives.

**Aggravated Medical Conditions** Eye disorders. Skin disorders. Respiratory disorders.

**Toxicologically synergistic products** None known.

**Toxicokinetics, metabolism and distribution** See ingredients information below.

Chemical name	Toxicokinetics, metabolism and distribution
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**

- 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

**Unknown Acute Toxicity**

0.01% of the mixture consists of ingredient(s) of unknown toxicity.

**Acute Toxicity Estimations (ATE)**

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

<b>Oral LD50</b>	1,992.00 mg/kg
<b>Dermal LD50</b>	No information available
<b>Mist</b>	No information available
<b>Vapor</b>	No information available
<b>Gas</b>	No information available

**Ingredient Acute Toxicity Data**

**Oral Exposure Route** If available, see data below

Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and
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	type	dose	time		sources for data
Phosphoric acid, potassium salt (1:1) (70 - 80%) CAS#: 7778-77-0	Mouse LD <sub>50</sub>	1700 mg/kg	None reported	None reported	IUCLID (The International Uniform Chemical Information Database)
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

**Dermal Exposure Route** If available, see data below

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Phosphoric acid, potassium salt (1:1) (70 - 80%) CAS#: 7778-77-0	Rabbit LD <sub>50</sub>	> 4640 mg/kg	None reported	None reported	RTECS (Registry of Toxic Effects of Chemical Substances)

**Inhalation (Dust/Mist) Exposure Route** If available, see data below

**Inhalation (Vapor) Exposure Route** If available, see data below

**Inhalation (Gas) Exposure Route** If available, see data below

**Product Specific Target Organ Toxicity Single Exposure 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 Specific Target Organ Toxicity Single Exposure Data**

**Oral Exposure Route** If available, see data below  
**Dermal Exposure Route** If available, see data below  
**Inhalation (Dust/Mist) Exposure Route** If available, see data below  
**Inhalation (Vapor) Exposure Route** If available, see data below  
**Inhalation (Gas) Exposure Route** If available, see data below

**Aspiration toxicity**

If available, see data below

**Kinematic viscosity** Not applicable

**Product Skin Corrosion/Irritation Data**

No data available.

**Ingredient Skin Corrosion/Irritation Data**

If available, see data below

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Potassium pyrosulfate	None reported	None reported	None reported	None reported	Corrosive to skin	Vendor SDS

(5 - 10%) CAS#: 7790-62-7						
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

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

No data available.

**Ingredient Eye Damage/Eye Irritation Data**

If available, see data below

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Potassium pyrosulfate (5 - 10%) CAS#: 7790-62-7	None reported	None reported	None reported	None reported	Corrosive to eyes	Vendor SDS
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

**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**

If available, see data below.

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**

If available, see data below.

**Chronic Toxicity Information**

**Product Specific Target Organ Toxicity Repeat Dose 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 Specific Target Organ Toxicity Repeat Exposure Data**

**Oral Exposure Route**

If available, see data below

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**Dermal Exposure Route**  
**Inhalation (Dust/Mist) Exposure Route**  
**Inhalation (Vapor) Exposure Route**  
**Inhalation (Gas) Exposure Route**

If available, see data below  
 If available, see data below  
 If available, see data below  
 If available, see data below

**Product Carcinogenicity Data**

**Oral Exposure Route**  
**Dermal Exposure Route**  
**Inhalation (Dust/Mist) Exposure Route**  
**Inhalation (Vapor) Exposure Route**  
**Inhalation (Gas) Exposure Route**

No data available  
 No data available  
 No data available  
 No data available  
 No data available

**Ingredient Carcinogenicity Data**

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-cyclohexanediylbis[N-(carboxymethyl)-, trisodium salt	36679-96-6	-	-	-	-

**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)	Does not apply

**Oral Exposure Route**  
**Dermal Exposure Route**  
**Inhalation (Dust/Mist) Exposure Route**  
**Inhalation (Vapor) Exposure Route**  
**Inhalation (Gas) Exposure Route**

If available, see data below  
 If available, see data below

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

No data available.

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

If available, see data below

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)

**Product Germ Cell Mutagenicity *in vivo* Data**

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

No data available  
 No data available  
 No data available

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**Inhalation (Vapor) Exposure Route**  
**Inhalation (Gas) Exposure Route**

No data available  
No data available

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

**Oral Exposure Route**  
**Dermal Exposure Route**  
**Inhalation (Dust/Mist) Exposure Route**  
**Inhalation (Vapor) Exposure Route**  
**Inhalation (Gas) Exposure Route**

If available, see data below  
If available, see data below

**Product Reproductive Toxicity Data**

**Oral Exposure Route**  
**Dermal Exposure Route**  
**Inhalation (Dust/Mist) Exposure Route**  
**Inhalation (Vapor) Exposure Route**  
**Inhalation (Gas) Exposure Route**

No data available  
No data available  
No data available  
No data available  
No data available

**Ingredient Reproductive Toxicity Data**

**Oral Exposure Route**  
**Inhalation (Dust/Mist) Exposure Route**  
**Inhalation (Vapor) Exposure Route**  
**Inhalation (Gas) Exposure Route**

If available, see data below  
If available, see data below  
If available, see data below  
If available, see data below

**Section 12: ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Unknown Aquatic Toxicity**

0.01% of the mixture consists of components(s) of unknown hazards to the aquatic environment

**Product Ecological Data**

**Aquatic toxicity**

**Fish**  
**Crustacea**  
**Algae**

No data available  
No data available  
No data available

**Ingredient Ecological Data**

**Aquatic toxicity**

**Fish**

If available, see ingredient data below

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 Environmental Risk Management Authority)
Benzenesulfonic acid, 4-amino-, monosodium salt (5 - 10%) CAS#: 515-74-2	96 hours	<i>Pimephales promelas</i>	LC <sub>50</sub>	100 mg/L	IUCLID (The International Uniform Chemical Information Database)
Glycine, N,N-1,2-cyclohexane diylbis[N-(carboxymethyl)-, 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**

If available, see ingredient data below

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-(carboxymethyl)-, 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** If available, see ingredient data below

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-(carboxymethyl)-, 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™

**Other Information**

**Persistence and degradability**

**Product Biodegradability Data**

No data available.

**Ingredient Biodegradability Data**

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**

**Product Bioaccumulation Data**

No data available.

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

log  $K_{ow}$  ~ -0.33

**Ingredient Bioaccumulation Data**

**Mobility**

**Soil Organic Carbon-Water Partition Coefficient**

log  $K_{oc}$  ~ 0.06

**Water solubility**

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

**Other adverse effects**

No information available.

**Section 13: DISPOSAL CONSIDERATIONS**

**Disposal methods**

**Waste from residues/unused products**

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging**

Do not reuse empty containers.

**Section 14: TRANSPORT INFORMATION**

**U.S. DOT**

Not regulated

**Emergency Response Guide Number** Not applicable

**IMDG**

Not regulated

**IATA**

Not regulated

**ADR**

Not regulated

**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.

**Section 15: REGULATORY INFORMATION**

**International Inventories**

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Does not comply
<b>ENCS</b>	Does not comply
<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>	Does not comply

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**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  
**TCSI** - Taiwan Chemical Substances Inventory  
**AICS** - Australian Inventory of Chemical Substances  
**NZIoC** - New Zealand Inventory of Chemicals

### **Country Regulations**

#### **Brazil**

Federal Decree No. 2.657, July 3, 1998  
Standard ABNT NBR 14725-3  
Ordinance No. 229, May 24, 2011 - Changes to Regulatory Standard No. 26  
Standard ABNT NBR 14725-4  
Resolution no. 420/2004 - ANTT  
Resolution no. 5.232 / 2016 - ANTT  
NR 15 Ministry of Labor and Employment  
Ordinance no. 1274 / 2003  
Federal Decree 3.665 / 2000  
Law no. 12.305 / 10  
Law no. 10.357 / 2001

#### **Argentina**

SRT 3359/2015  
Resolution 801/2015  
Law of Health and Safety and Work (Law 19,587)  
Decree 351/79  
Regulatory Law 19587

#### **Columbia**

Law 253, 1996: Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal.  
Resolution 2400/1979: Ministry of Labour and Social Security, ACGIH Exposure Limits.  
Decision 602, Andean Regulation for the Control of chemical substances used in the illegal manufacture of narcotic drugs and psychotropic substances.  
Law 29/1992: Montreal Protocol on Substances that Deplete the Ozone Layer and its Amendments.  
Law 55/1993: Recommendation No. 177 on the International Work Conference on Safety in the Use of Chemical Products at Work.  
Law 30/1990: Vienna Convention for the Protection of the Ozone Layer.  
Law 55/1993: Convention No. 170 on the General Conference of the ILO.

#### **Uruguay**

Law 16.157: Approval of the Montreal Protocol on Substances that Deplete the Ozone Layer.  
Law 17.283: Regarding environmental protection and management of hazardous wastes.  
Presidential Decree 346/11: Implementation of GHS for all manufactured or distributed products.  
Presidential Decree 519/984: Regulates the activities relating to the use of radioactive materials and ionizing radiation throughout the country.

#### **Ecuador**

Law No. 37 - Environmental Management Act  
NTE INEN 2266:2013 - Requirements for Transport, Storage and Handling of Hazardous Materials  
Unified Text of Secondary Legislation of the Environment Ministry: Book VI

## **Section 16: OTHER INFORMATION**

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

NIOSH IDLH

*Immediately Dangerous to Life or Health*

EN / BGHS

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ACGIH  
NDF

ACGIH (American Conference of Governmental Industrial Hygienists)  
no data

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

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Ceiling Limit Value	MAC	Maximum Allowable Concentration
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		

**NIOSH (RTECS) Number** None reported

**Key literature references and sources for data**

See Section 11: TOXICOLOGICAL INFORMATION  
See Section 12: ECOLOGICAL INFORMATION

**Issue Date** 30-Aug-2016

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**Revision Note** SDS sections updated 2

**Restrictions on use** None

**Training Advice** Immediately call a POISON CENTER or doctor/physician Specific treatment (see .? on this label)

**This material safety data sheet has been prepared according to Brazilian legislation and ABNT NBR 14725:2009**

**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