



**Be Right™**

# SAFETY DATA SHEET

Issue Date 07-Oct-2018

Revision Date 01-Jan-2019

Version 1.3

## 1. Identification

### Product identifier

**Product Name** NitriVer® 3 Nitrite Reagent

### Other means of identification

**Product Code(s)** 1406599

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

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

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

#### **Manufacturer Address**

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

#### **Emergency telephone number**

**Emergency Telephone** +1(303) 623-5716 - 24 Hour Service

## 2. Hazards identification

### Classification

Acute toxicity - Oral	Category 4 - (H302)
Serious eye damage/eye irritation	Category 1 - (H318)
Skin sensitization	Category 1 - (H317)

### Label elements

**Signal word** - Danger

#### **Hazard statements**

H302 - Harmful if swallowed

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage



Exclamation mark  
Corrosion

**Precautionary statements**

P270 - Do not eat, drink or smoke when using this product

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell

P330 - Rinse mouth

P501 - Dispose of contents/ container to an approved waste disposal plant

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

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

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

P362 + P364 - Take off contaminated clothing and wash it before reuse

**Other Hazards Known**

Not applicable

### 3. Composition/information on ingredients

**Substance**

Not applicable.

**Mixture**

**Chemical Family** Mixture.

**Chemical nature** Mixture of organic compounds.

Chemical name	CAS No.	Synonyms	Percent Range
Phosphoric acid, potassium salt (1:1)	7778-77-0	No information available	70 - 80%
Potassium pyrosulfate	7790-62-7	No information available	5 - 10%
Benzenesulfonic acid, 4-amino-, monosodium salt	515-74-2	No information available	5 - 10%

### 4. First aid measures

**Description of 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.

**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.

**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.

**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.

**Self-protection of the first aider** Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

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

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

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

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

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

**Hazardous combustion products** No information available.

**Explosion data**

**Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** None.

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

## 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.

**Other information** Refer to protective measures listed in Sections 7 and 8.

**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.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

## 7. Handling and storage

**Precautions 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.

#### **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.

## **8. Exposure controls/personal protection**

#### **Control parameters**

**Exposure Limits** 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.

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

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

**Hand protection** Wear suitable gloves.

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

**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.

**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.

## **9. Physical and chemical properties**

#### **Information on basic physical and chemical properties**

<b>Physical state</b>	Solid	<b>Color</b>	white
<b>Appearance</b>	powder	<b>Odor threshold</b>	No data available
<b>Odor</b>	Odorless		

<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	

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**

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

**Solubility in other solvents**

Chemical Name	Solubility classification	Solubility	Solubility Temperature
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	-

**Explosive properties**

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

**Flammable properties**

Flash point Not applicable

**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

## 10. Stability and reactivity

**Reactivity** No information available.

**Chemical stability** Stable under normal conditions.

**Possibility of Hazardous Reactions** None under normal processing.

**Conditions to avoid** None known based on information supplied.

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

**Hazardous Decomposition Products** Phosphorus oxides. Carbon dioxide. Carbon monoxide. Sodium oxides.

## 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.

#### Acute toxicity

Based on available data, the classification criteria are not met

#### **Product Acute Toxicity Data**

No data available.

#### **Ingredient Acute Toxicity Data**

Test data reported 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	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%)	Rat LD <sub>50</sub>	12300 mg/kg	None reported	None reported	IUCLID (The International Uniform Chemical Information Database)

CAS#: 515-74-2					
----------------	--	--	--	--	--

**Unknown acute toxicity**

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

- 0.01 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 0.01 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 0.01 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)
- 0.01 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
- 0.01 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

**Acute Toxicity Estimations (ATE)**

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

<b>ATEmix (oral)</b>	1,992.00
<b>ATEmix (dermal)</b>	No information available
<b>ATEmix (inhalation-dust/mist)</b>	No information available
<b>ATEmix (inhalation-vapor)</b>	No information available
<b>ATEmix (inhalation-gas)</b>	No information available

**Skin corrosion/irritation**

May cause skin irritation.

**Product Skin Corrosion/Irritation Data**

No data available.

**Ingredient Skin Corrosion/Irritation Data**

No data available.

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 skin	Vendor SDS
Benzenesulfonic acid, 4-amino-, monosodium salt (5 - 10%) CAS#: 515-74-2	Patch test	Rabbit	None reported	None reported	Skin irritant	No information available

**Serious eye damage/eye irritation**

Classification based on data available for ingredients. Causes burns. Risk of serious damage to eyes.

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

No data available.

**Ingredient Eye Damage/Eye Irritation Data**

No data available.

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

**Respiratory or skin sensitization**

May cause sensitization by skin contact.

**Product Sensitization Data**

No data available.

#### Ingredient Sensitization Data

No data available.

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)

#### STOT - single exposure

Based on available data, the classification criteria are not met.

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

No data available.

#### Ingredient Specific Target Organ Toxicity Single Exposure Data

No data available.

#### STOT - repeated exposure

Based on available data, the classification criteria are not met.

#### Product Specific Target Organ Toxicity Repeat Dose Data

No data available.

#### Ingredient Specific Target Organ Toxicity Repeat Exposure Data

No data available.

#### Carcinogenicity

Based on available data, the classification criteria are not met.

#### Product Carcinogenicity Data

No data available.

#### Ingredient Carcinogenicity Data

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	-	-	-	-

#### 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

#### Germ cell mutagenicity

Based on available data, the classification criteria are not met.

#### Product Germ Cell Mutagenicity invitro Data

No data available.

#### Ingredient Germ Cell Mutagenicity invitro Data



No data available.

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

No data available.

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

No data available.

**Reproductive toxicity**

Based on available data, the classification criteria are not met.

**Product Reproductive Toxicity Data**

No data available.

**Ingredient Reproductive Toxicity Data**

No data available.

**Aspiration hazard**

Based on available data, the classification criteria are not met.

## 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 Acute Toxicity**

No data available.

**Aquatic Chronic Toxicity**

No data available.

**Ingredient Ecological Data**

**Aquatic Acute Toxicity**

No data available.

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 (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)
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)
<b>Chemical name</b>	<b>Exposure time</b>	<b>Species</b>	<b>Endpoint type</b>	<b>Reported dose</b>	<b>Key literature references and sources for data</b>
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)

**Aquatic Chronic Toxicity**

No data available.

**Persistence and degradability****Product Biodegradability Data**

No data available.

**Bioaccumulation****Product Bioaccumulation Data**

No data available.

**Partition Coefficient (n-octanol/water)**log K<sub>ow</sub> ~ -0.33**Mobility****Soil Organic Carbon-Water Partition Coefficient**log K<sub>oc</sub> ~ 0.06**Other adverse effects**

No information available.

### 13. Disposal considerations

**Waste treatment 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.

### 14. Transportation information

**MEX**

Not regulated

**Note:**

No special precautions necessary.

**TDG**

Not regulated

**U.S. DOT**

Not regulated

**ICAO (air)**

Not regulated

<u>IATA</u>	Not regulated
<u>IMDG</u>	Not regulated
<u>RID</u>	Not regulated
<u>ADR</u>	Not regulated
<u>ADN</u>	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.

## 15. Regulatory information

### Safety, health and environmental regulations/legislation specific for the substance or mixture

#### International Regulations

**The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable

**The Rotterdam Convention** Not applicable

#### International Inventories

<b>TSCA</b>	Complies.
<b>DSL/NDSL</b>	Complies.
<b>EINECS/ELINCS</b>	Contact supplier for inventory compliance status.
<b>ENCS</b>	Contact supplier for inventory compliance status.
<b>IECSC</b>	Complies.
<b>KECL</b>	Complies.
<b>PICCS</b>	Contact supplier for inventory compliance status.
<b>AICS</b>	Contact supplier for inventory compliance status.

**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

## 16. Other information

<u>NFPA</u>	Health hazards 3	Flammability 0	Instability 0	Physical and chemical properties - Personal protection X
<u>HMIS</u>	Health hazards 3	Flammability 0	Physical hazards 0	

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

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

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	SKN*	Skin designation

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
U.S. Environmental Protection Agency ChemView Database  
European Food Safety Authority (EFSA)  
EPA (Environmental Protection Agency)  
Acute Exposure Guideline Level(s) (AEGl(s))  
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
Japan GHS Classification  
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
RTECS (Registry of Toxic Effects of Chemical Substances)  
World Health Organization

**Prepared By** Hach Product Compliance Department.

**Issue Date** 07-Oct-2018

**Revision Date** 01-Jan-2019

**Revision Note** None

**NOM-018-STPS-2015**

The information is believed to be accurate, but it is not exhaustive and must be used only as guidance. It is based on the current state of knowledge of the chemical substance or mixture and is applicable to the appropriate safety precautions for the product.

**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©2018

**End of Safety Data Sheet**