

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

MSDS No: M00055

## MATERIAL SAFETY DATA SHEET

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** NitriVer ® 3 Nitrite Reagent  
**Catalog Number:** 1407899

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

Emergency Telephone Numbers:  
(Medical and Transportation)  
(303) 623-5716 24 Hour Service  
(515)232-2533 8am - 4pm CST

**MSDS Number:** M00055  
**Chemical Name:** Not applicable  
**CAS No.:** Not applicable  
**Chemical Formula:** Not applicable  
**Chemical Family:** Not applicable  
**Hazard:** Causes eye burns.  
**Date of MSDS Preparation:**  
**Day:** 09  
**Month:** February  
**Year:** 2012

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

#### Chromatropic Acid, Disodium salt

**CAS No.:** 129-96-4  
**TSCA CAS Number:** 129-96-4  
**Percent Range:** 1.0 - 5.0  
**Percent Range Units:** weight / weight  
**LD50:** Oral rat LD50 > 5000 mg/kg  
**LC50:** None reported  
**TLV:** Not established  
**PEL:** Not established  
**Hazard:** May cause irritation.

#### Sodium Sulfanilate

**CAS No.:** 515-74-2  
**TSCA CAS Number:** 515-74-2  
**Percent Range:** 5.0 - 15.0  
**Percent Range Units:** weight / weight  
**LD50:** None reported  
**LC50:** None reported  
**TLV:** Not established  
**PEL:** Not established  
**Hazard:** Toxic properties unknown. May cause irritation.

#### Potassium Pyrosulfate

**CAS No.:** 7790-62-7  
**TSCA CAS Number:** 7790-62-7  
**Percent Range:** 1.0 - 10.0  
**Percent Range Units:** weight / weight  
**LD50:** Oral rat LD50 = 2340 mg/kg  
**LC50:** None reported

*TLV:* Not established  
*PEL:* Not established  
*Hazard:* Causes eye burns.

**Potassium Phosphate, Monobasic**

*CAS No.:* 7778-77-0  
*TSCA CAS Number:* 7778-77-0  
*Percent Range:* 75.0 - 85.0  
*Percent Range Units:* weight / weight  
*LD50:* Oral rat LD50 = 7100 mg/kg  
*LC50:* None reported  
*TLV:* Not established  
*PEL:* Not established  
*Hazard:* May cause irritation.

**1,2-Cyclohexanediaminetetraacetic Acid Trisodium Salt**

*CAS No.:* 36679-96-6  
*TSCA CAS Number:* 36679-96-6  
*Percent Range:* 1.0 - 5.0  
*Percent Range Units:* weight / weight  
*LD50:* None reported  
*LC50:* None reported  
*TLV:* Not established  
*PEL:* Not established  
*Hazard:* Toxic properties unknown. May cause irritation.

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### 3. HAZARDS IDENTIFICATION

***Emergency Overview:***

***Appearance:*** White powder

***Odor:*** Not determined

CAUSES EYE BURNS MAY CAUSE SKIN AND RESPIRATORY TRACT IRRITATION

***HMIS:***

***Health:*** 3

***Flammability:*** 0

***Reactivity:*** 0

***Protective Equipment:*** X - See protective equipment, Section 8.

***NFPA:***

***Health:*** 2

***Flammability:*** 0

***Reactivity:*** 0

***Symbol:*** Not applicable

***Potential Health Effects:***

***Eye Contact:*** Causes eye burns.

***Skin Contact:*** May cause irritation

***Skin Absorption:*** None reported

***Target Organs:*** None reported

***Ingestion:*** May cause: irritation of the mouth and esophagus Very large doses may cause: gastrointestinal disturbances cardiac depression kidney damage

***Target Organs:*** Heart Kidneys

***Inhalation:*** May cause: irritation of nose and throat

***Target Organs:*** None reported

***Medical Conditions Aggravated:*** Pre-existing: Eye conditions Kidney conditions Central nervous system diseases

***Chronic Effects:*** None reported

***Cancer / Reproductive Toxicity Information:***

This product does NOT contain any OSHA listed carcinogens.

This product does NOT contain any IARC listed chemicals.

This product does NOT contain any NTP listed chemicals.

***Additional Cancer / Reproductive Toxicity Information:*** None reported

***Toxicologically Synergistic Products:*** None reported

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## 4. FIRST AID

**Eye Contact:** Immediately flush eyes with water for 15 minutes. Call physician.

**Skin Contact (First Aid):** Wash skin with soap and plenty of water. Call physician if irritation develops.

**Ingestion (First Aid):** Do not induce vomiting. Give 1-2 glasses of water. Call physician immediately. Never give anything by mouth to an unconscious person.

**Inhalation:** Remove to fresh air. Give artificial respiration if necessary. Call physician.

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## 5. FIRE FIGHTING MEASURES

**Flammable Properties:** During a fire, this product decomposes to form toxic gases.

**Flash Point:** Not applicable

**Method:** Not applicable

**Flammability Limits:**

**Lower Explosion Limits:** Not applicable

**Upper Explosion Limits:** Not applicable

**Autoignition Temperature:** Not applicable

**Hazardous Combustion Products:** Toxic fumes of: phosphorus oxides carbon monoxide, carbon dioxide.

**Fire / Explosion Hazards:** None reported

**Static Discharge:** None reported.

**Mechanical Impact:** None reported

**Extinguishing Media:** Use media appropriate to surrounding fire conditions

**Fire Fighting Instruction:** As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear.

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## 6. ACCIDENTAL RELEASE MEASURES

**Spill Response 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.

**Containment Technique:** Stop spilled material from being released to the environment.

**Clean-up Technique:** Scoop up spilled material into a large beaker and dissolve with water. Adjust to a pH between 6 and 9 with an alkali, such as soda ash or sodium bicarbonate. Flush the spilled material to the drain with a large excess of water.

**Evacuation Procedure:** Evacuate local area (15 foot radius or as directed by your facility's emergency response plan) when: any quantity is spilled.

**Special Instructions (for accidental release):** Not applicable

**304 EHS RQ (40 CFR 355):** Not applicable

**D.O.T. Emergency Response Guide Number:** None

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## 7. HANDLING / STORAGE

**Handling:** Avoid contact with eyes skin Do not breathe dust. Wash thoroughly after handling. Maintain general industrial hygiene practices when using this product.

**Storage:** Protect from: light heat moisture

**Flammability Class:** Not applicable

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## 8. EXPOSURE CONTROLS / PROTECTIVE EQUIPMENT

**Engineering Controls:** Have an eyewash station nearby. Maintain general industrial hygiene practices when using this product.

**Personal Protective Equipment:**

**Eye Protection:** safety glasses with top and side shields

**Skin Protection:** disposable latex gloves lab coat

**Inhalation Protection:** adequate ventilation

**Precautionary Measures:** Avoid contact with: eyes skin Do not breathe: dust Wash thoroughly after handling. Protect from: light heat moisture

*TLV:* Not established

*PEL:* Not established

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## 9. PHYSICAL / CHEMICAL PROPERTIES

*Appearance:* White powder

*Physical State:* Solid

*Molecular Weight:* Not applicable

*Odor:* Not determined

*pH:* of 5% solution = 3.2

*Vapor Pressure:* Not applicable

*Vapor Density (air = 1):* Not applicable

*Boiling Point:* Not applicable

*Melting Point:* 224°C (435°F)

*Specific Gravity/ Relative Density (water = 1; air =1):* 3.12

*Evaporation Rate (water = 1):* Not applicable

*Volatile Organic Compounds Content:* Not applicable

*Partition Coefficient (n-octanol / water):* Not applicable

*Solubility:*

*Water:* Soluble

*Acid:* Not determined

*Other:* Not determined

*Metal Corrosivity:*

*Steel:* 0.057 in/yr

*Aluminum:* 0.00 in/yr

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## 10. STABILITY / REACTIVITY

*Chemical Stability:* Stable when stored under proper conditions.

*Conditions to Avoid:* Excess moisture Extreme temperatures

*Reactivity / Incompatibility:* None reported

*Hazardous Decomposition:* Toxic fumes of: phosphorus oxides carbon dioxide carbon monoxide

*Hazardous Polymerization:* Will not occur.

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## 11. TOXICOLOGICAL INFORMATION

*Product Toxicological Data:*

*LD50:* None reported

*LC50:* None reported

*Dermal Toxicity Data:* None reported

*Skin and Eye Irritation Data:* None reported

*Mutation Data:* None reported

*Reproductive Effects Data:* None reported

*Ingredient Toxicological Data:* Chromatropic Acid: Oral rat LD50: >5000 mg/kg, Potassium Phosphate Monobasic: Oral rat LD50 = 7100 mg/kg, Potassium Pyrosulfate: Oral rat LD50 = 2340 mg/kg

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## 12. ECOLOGICAL INFORMATION

*Product Ecological Information:* --

No ecological data available for this product. Mobility in soil: No data available

*Ingredient Ecological Information:* Sodium Sulfanilate: pimephales promelas 96hr LC50 = 100.4 mg/l; Daphnia magna 48hr EC50 = 85.66 mg/l; Scenedesmus subspicatus 72hr EC50 = 91mg/l. Potassium Pyrosulfate: Oncorhynchus mykiss 96 hr LC50 = 420 mg/L; Daphnia magna 48 hr EC50 = 140 mg/L

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## 13. DISPOSAL CONSIDERATIONS

*EPA Waste ID Number:* None

*Special Instructions (Disposal):* 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.

**Empty Containers:** Rinse three times with an appropriate solvent. Dispose of empty container as normal trash.

**NOTICE (Disposal):** These disposal guidelines are based on federal regulations and may be superseded by more stringent state or local requirements. Please consult your local environmental regulators for more information.

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## 14. TRANSPORT INFORMATION

### **D.O.T.:**

**D.O.T. Proper Shipping Name:** Not Currently Regulated

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**DOT Hazard Class:** NA

**DOT Subsidiary Risk:** NA

**DOT ID Number:** NA

**DOT Packing Group:** NA

### **I.C.A.O.:**

**I.C.A.O. Proper Shipping Name:** Not Currently Regulated

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**ICAO Hazard Class:** NA

**ICAO Subsidiary Risk:** NA

**ICAO ID Number:** NA

**ICAO Packing Group:** NA

### **I.M.O.:**

**I.M.O. Proper Shipping Name:** Not Currently Regulated

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**I.M.O. Hazard Class:** NA

**I.M.O. Subsidiary Risk:** NA

**I.M.O. ID Number:** NA

**I.M.O. Packing Group:** NA

**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 set or kit, the classification given above applies. If the item IS part of a set or kit, the classification would change to the following: UN3316 Chemical Kit, Class 9, PG II or III. If the item is not regulated, the Chemical Kit classification does not apply.

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## 15. REGULATORY INFORMATION

### **U.S. Federal Regulations:**

**O.S.H.A.:** This product meets the criteria for a hazardous substance as defined in the Hazard Communication Standard. (29 CFR 1910.1200)

### **E.P.A.:**

**S.A.R.A. Title III Section 311/312 Categorization (40 CFR 370):** Immediate (Acute) Health Hazard

**S.A.R.A. Title III Section 313 (40 CFR 372):** This product does NOT contain any chemical subject to the reporting requirements of Section 313 of Title III of SARA.

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**302 (EHS) TPQ (40 CFR 355):** Not applicable

**304 CERCLA RQ (40 CFR 302.4):** Not applicable

**304 EHS RQ (40 CFR 355):** Not applicable

**Clean Water Act (40 CFR 116.4):** Not applicable

**RCRA:** Contains no RCRA regulated substances.

**C.P.S.C.:** Not applicable

### **State Regulations:**

**California Prop. 65:** No Prop. 65 listed chemicals are present in this product.

**Identification of Prop. 65 Ingredient(s):** None

**California Perchlorate Rule CCR Title 22 Chap 33:** No

**Trade Secret Registry:** Not applicable

### **National Inventories:**

**U.S. Inventory Status:** This product contains a chemical(s) exempt from the TSCA 8(b) Inventory due to a Low Volume Exemption held by Hach Company.

**TSCA CAS Number:** Not applicable

1,2-Cyclohexanediaminetetraacetic Acid Trisodium Salt. This chemical may only be used as a chelating reagent for chemical reactions.

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## 16. OTHER INFORMATION

**Intended Use:** Laboratory Reagent Determination of nitrite

**References:** 29 CFR 1900 - 1910 (Code of Federal Regulations - Labor). Air Contaminants, Federal Register, Vol. 54, No. 12. Thursday, January 19, 1989. pp. 2332-2983. Fire Protection Guide on Hazardous Materials, 10th Ed. Quincy, MA: National Fire Protection Fire Protection Guide on Hazardous Materials, 10th Ed. Quincy, MA: National Fire Protection Association, 1991. In-house information. Technical Judgment. TLV's Threshold Limit Values and Biological Exposure Indices for 1992-1993. American Conference of Governmental Industrial Hygienists, 1992.

**Revision Summary:** Substantial revision to comply with EU Reg 1272/2008, Reg 1907/2006 and UN GHS (ST/SG/AC.10/36/Add.3).

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**Legend:**

NA - Not Applicable	w/w - weight/weight
ND - Not Determined	w/v - weight/volume
NV - Not Available	v/v - volume/volume

**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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