Iron(2+) ethylenediammonium sulphate (cas 63589-59-3) MSDS

World Headquarters
Hach Company
P.O.Box 389 MSDS No: M0031
Loveland, CO USA 80539
(970) 669-3050
SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING
Product Name: NitriVer ? 2 Nitrite Reagent
Catalog Number: 2107569
HACH Lange GmbH Emergency Telephone Numbers:
Willst?tterstrasse 11 (Poison Information Center Main)
40549 D??sseldorf, Germany (+49 (0) 6131 19240) 24 H +49-(0)211-52880
SDS Number: M00031
Chemical Name: Not applicable
Chemical Formula: Not applicable
Chemical Family: Not applicable
Use of the substance/preparation: Determination of nitrite
CAS No.: Not applicable
Hazard: Causes eye burns.
date of MSDS Preparation:
Day: 16
Month: March
Year: 2006
Additional Emergency Response Numbers: Austria: +49 (0)6131 19240, Belgium: +32-(0)70-245245, France: +33-(0)1-40370404, Italy: +39-02-66101029, Netherlands: +31-(0)30-2748888, Switzerland: +41-(01)-2515151

2. COMPOSITION / INFORMATION ON INGREDIENTS
Potassium Pyrosulfate
EEC Number: 2322168
CAS No.: 7790-62-7
Percent Range: 35.0 - 45.0
Percent Range Units: weight / weight
Ingredient EEC Symbol: Xi - IRRITATING
Ingredient R phrase(s) (R phrase details given in Heading 16): R 41
TLV: Not established
PEL: Not established
EU Occupational Exposure Limits: 3 mg/m3, Inhalable dust
Ferrous Ethylenediammonium Sulfate
EEC Number: 2643576
CAS No.: 63589-59-3
Percent Range: 55.0 - 65.0
Percent Range Units: weight / weight
Ingredient EEC Symbol: Not applicable
Ingredient R phrase(s) (R phrase details given in Heading 16): Not applicable
TLV: 1 mg/m3 as Fe
PEL: 1 mg/m3 as Fe
EU Occupational Exposure Limits: 3 mg/m3, Inhalable dust

3. HAZARDS IDENTIFICATION
Emergency Overview:
Appearance: Pale green powder
Odor: None
EU Symbols: Xi - IRRITATING
R PHRASES: R 41: Risk of serious damage to eyes.
Protective Equipment:
Potential Health Effects:

- **Eye Contact (EC):** Causes irritation
- **Skin Contact (EC):** May cause irritation
- **Skin Absorption (SA E):** None Reported
- **Target Organs (SA E):** None Reported
- **Ingestion (EC):** May cause: nausea, vomiting, diarrhea, liver damage, coma, death. Iron poisoning is indicated by pink urine discoloration.
- **Target Organs (Ing E):** Liver
- **Inhalation:** May cause: respiratory tract irritation
- **Target Organs (Inh E):** None Reported
- **Medical Conditions Aggravated:** Pre-existing: Eye conditions, Liver conditions
- **Chronic Effects:** Chronic overexposure may cause liver damage
- **Cancer / Reproductive Toxicity Information:** This product does NOT contain any IARC listed chemicals.
- **Additional Cancer / Reproductive Toxicity Information:** None reported
- **Toxicologically Synergistic Products:** None reported

4. FIRST AID MEASURES

- **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.

5. FIRE FIGHTING MEASURES

- **Flammable Properties:** Can burn in fire, releasing toxic vapors.
- **Hazardous Combustion Products:** Toxic fumes of: nitrogen oxides, sulfur oxides.
- **Fire / Explosion Hazards:** May react violently with: strong bases, strong reducers
- **Static Discharge:** None reported
- **Mechanical Impact:** None reported
- **Extinguishing Media:** Water, Carbon dioxide, Dry chemical.
- **Extinguishing Media NOT To Be Used:** Not applicable
- **Fire Fighting Instruction:** As in any fire, wear self-contained breathing apparatus, pressure-demand and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

- **Spill Response 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.
- **Containment Technique:** Stop spilled material from being released to the environment. Cover spilled solid material with sand or other inert material.
- **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 reacted material to the drain with a large excess of water. Decontaminate the area of the spill with a soap solution.
- **Evacuation Procedure:** Evacuate local area (15 foot radius or as directed by your facility's emergency response plan) when: a pound or more of loose powder is spilled. If conditions warrant, increase the size of the evacuation.

7. HANDLING AND 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: heat, moisture
- **Special Packaging Instructions:** Not applicable
- **Use of the substance/preparation:** Determination of nitrite

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 / Hand Protection:** Lab coat, disposable latex gloves
  - **Inhalation Protection:** Adequate ventilation
- **Precautionary Measures:** Avoid contact with: eyes, skin. Do not breathe dust. Wash thoroughly after handling.
- **TLV:** Not established
- **PEL:** Not established
9. PHYSICAL / CHEMICAL PROPERTIES
Appearance: Pale green powder
Physical State: Solid
Odor: None
pH of 5% solution = 1,30
Vapor Pressure: Not applicable
Vapor Density (air = 1): Not applicable
Boiling Point: Not applicable
Melting Point: 156-164 C
Flash Point: Not applicable
Method: Not applicable
Autoignition Temperature: Not determined
Flammability Limits:
Lower Explosion Limits: Not applicable
Upper Explosion Limits: Not applicable
Specific Gravity (water = 1): 2,06
Evaporation Rate (water = 1): Not applicable
Volatile Organic Compounds Content: Not determined
Partition Coefficient (n-octanol / water): Not determined
Solubility:
Water: soluble
Acid: Soluble
Other: Not determined
Metal Corrosivity:
Steel: Not Applicable
Aluminum: Not Applicable

10. STABILITY / REACTIVITY
Chemical Stability: Stable when stored under proper conditions.
Conditions to Avoid: Excess moisture Heating to decomposition.
Reactivity / Incompatibility: Incompatible with: strong bases reducers
Hazardous Decomposition: Toxic fumes of: sodium oxides nitrogen oxides
Hazardous Polymerization: Will not occur.

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: Potassium Pyrosulfate: Oral rat LD50 = 2340 mg/kg
This product does NOT contain any IARC listed chemicals.

12. ECOLOGICAL INFORMATION
Product Ecological Information: --
No ecological data available for this product.
Ingredient Ecological Information: --
No ecological data available for the ingredients of this product.

13. DISPOSAL CONSIDERATIONS
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. In Europe: Chemical and analysis solutions must be disposed of in compliance with the respective national regulations. Product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system.

14. TRANSPORT INFORMATION
I.C.A.O.:
I.C.A.O. Proper Shipping Name: Not Currently Regulated

ICAO Hazard Class: NA
ICAO Subsidiary Risk: NA
ICAO UN/ID Number: NA
ICAO Packing Group: NA
I.M.O.:
I.M.O. Proper Shipping Name: Not Currently Regulated
I.M.O. Hazard Class: NA
I.M.O. Subsidiary Risk: NA
I.M.O. UN Number: NA
I.M.O. Packing Group: NA
A.D.R.:
A.D.R. Proper Shipping Name: Not Currently Regulated
A.D.R. Hazard Class: NA
A.D.R. Subsidiary Risk: NA
A.D.R. UN Number: NA
A.D.R. Packing Group: NA
Additional Information: This product may be shipped as part of a chemical kit composed of various compatible dangerous goods for analytical or testing purposes. This kit would have the following classification: Proper Shipping Name: Chemical Kit Hazard Class: 9 UN Number 3316

15. REGULATORY INFORMATION
National Inventories:
EEC Inventory Status: All ingredients used to make this product are listed on EINECS / ELINCS.
EEC Number: Not applicable
EEC LABEL COPY:
EU Symbols: Xi - IRRITATING
R PHRASES: R 41: Risk of serious damage to eyes.
S PHRASES: S 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S 37/39: Wear suitable gloves and eye/face protection.

16. OTHER INFORMATION
R PHRASES: R 41: Risk of serious damage to eyes.
Use of the substance/preparation: Determination of nitrite
Revision Summary: Updates in Section(s) 14,

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.
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