

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

MSDS No: M00213

## SAFETY DATA SHEET

---

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product Name:** Sulfide 1 Reagent  
**Catalog Number:** 181632

HACH LANGE GmbH  
Willstätterstrasse 11  
40549 Düsseldorf, Germany  
+49-(0)211-52880

Emergency Telephone Numbers:  
(Poison Information Center Main)  
(+49 (0) 6131 19240) 24 HR

**SDS Number:** M00213

**Chemical Name:** Not applicable

**Chemical Formula:** Not applicable

**Chemical Family:** Not applicable

**Use of the substance/preparation:** Determination of sulfides

**CAS No.:** Not applicable

**Hazard:** Harmful if inhaled. Causes severe burns. Carcinogen.

**Date of MSDS Preparation:**

**Day:** 03

**Month:** May

**Year:** 2007

**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-(0)1-2515151

---

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

#### Demineralized Water

**EEC Number:** 2317912

**CAS No.:** 7732-18-5

**Percent Range:** 35,0 - 45,0

**Percent Range Units:** weight / weight

**Ingredient EEC Symbol:** Not applicable

**Ingredient R phrase(s) (R phrase details given in Heading 16):** Not applicable

**TLV:** Not established

**PEL:** Not established

**EU Occupational Exposure Limits:** Not established

#### Other component

**EEC Number:** Not applicable

**CAS No.:** Not applicable

**Percent Range:** 0,1 - 1,0

**Percent Range Units:** weight / weight

**Ingredient EEC Symbol:** Not applicable

**Ingredient R phrase(s) (R phrase details given in Heading 16):** Not applicable

**TLV:** Not established

**PEL:** Not established

*EU Occupational Exposure Limits:* Not established

### **Sulfuric Acid**

*EEC Number:* 2316395

*CAS No.:* 7664-93-9

*Percent Range:* 55,0 - 65,0

*Percent Range Units:* weight / weight

*Ingredient EEC Symbol:* C - CORROSIVE

*Ingredient R phrase(s) (R phrase details given in Heading 16):* R 35

*TLV:* 1 mg/m<sup>3</sup> (TWA); 3 mg/m<sup>3</sup> (STEL)

*PEL:* 1 mg/m<sup>3</sup>

*EU Occupational Exposure Limits:* 0,1 mg/m<sup>3</sup>

---

## **3. HAZARDS IDENTIFICATION**

### *Emergency Overview:*

*Appearance:* Clear, colorless

*Odor:* None

*EU Symbols:* C - CORROSIVE

*R PHRASES:* R 35: Causes severe burns.

### *Protective Equipment:*

#### *Potential Health Effects:*

*Eye Contact (EC):* Causes severe burns

*Skin Contact (EC):* Causes severe burns

*Skin Absorption (EC):* None Reported

*Target Organs (SA E):* None Reported

*Ingestion (EC):* Causes: severe burns May cause: nausea vomiting death circulatory disturbances rapid pulse and respirations diarrhea

*Target Organs (Ing E):* None Reported

*Inhalation:* Harmful Causes: severe burns May cause: teeth erosion mouth soreness difficult breathing

*Target Organs (Inh E):* Lungs

*Medical Conditions Aggravated:* Pre-existing: Eye conditions Respiratory conditions

*Chronic Effects:* Chronic overexposure may cause erosion of the teeth chronic irritation or inflammation of the lungs cancer

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

An ingredient of this mixture is: IARC Group 1: Recognized Carcinogen

Sulfuric Acid - The IARC evaluation was based on exposure to the mist or vapor of concentrated sulfuric acid generated during chemical processes.

*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 plenty of water for 15 minutes. Remove contaminated clothing. Call physician immediately.

*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:** Not Flammable, but reacts with most metals to form flammable hydrogen gas. During a fire, corrosive and toxic gases may be generated by thermal decomposition.

**Hazardous Combustion Products:** This material will not burn. May emit acrid smoke and fumes.

**Fire / Explosion Hazards:** Contact with metals gives off hydrogen gas which is flammable. May react violently with: strong bases water

**Static Discharge:** None reported.

**Mechanical Impact:** None reported

**Extinguishing Media:** Dry chemical. Do NOT use water.

**Extinguishing Media NOT To Be Used:** Not applicable. Do NOT use water.

**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:** Absorb spilled liquid with non-reactive sorbent material. Stop spilled material from being released to the environment. Dike large spills to keep spilled material from entering sewage and drainage systems or bodies of water.

**Clean-up Technique:** Remove all combustible materials from the spill area. Absorb spilled liquid with non-reactive sorbent material. Work in an approved fume hood. Working in small batches, dilute with excess water. Adjust to a pH between 6 and 9 with an alkali, such as soda ash or sodium bicarbonate. Filter to remove solids. 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: any quantity is spilled. If conditions warrant, increase the size of the evacuation.

---

## 7. HANDLING AND STORAGE

**Handling:** Avoid contact with eyes skin clothing. Do not breathe mist or vapors. Wash thoroughly after handling. Use with adequate ventilation. Maintain general industrial hygiene practices when using this product.

**Storage:** Store between 10° and 25°C. Keep container tightly closed when not in use. Keep away from: alkalies oxidizers reducers metals

**Special Packaging Instructions:** Not applicable

**Use of the substance/preparation:** Determination of sulfides

---

## 8. EXPOSURE CONTROLS / PROTECTIVE EQUIPMENT

**Engineering Controls:** Have an eyewash station nearby. Have a safety shower nearby. Use general ventilation to minimize exposure to mist, vapor or dust. Maintain general industrial hygiene practices when using this product.

### **Personal Protective Equipment:**

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

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

**Inhalation Protection:** adequate ventilation

**Precautionary Measures:** Avoid contact with: eyes skin clothing. Do not breathe: mist/vapor. Wash thoroughly after handling. Use with adequate ventilation. Keep away from: alkalies metals oxidizers reducers

**TLV:** Not established

**PEL:** Not established

**EU Occupational Exposure Limits:** Not established

---

## 9. PHYSICAL / CHEMICAL PROPERTIES

**Appearance:** Clear, colorless

**Physical State:** Liquid

**Odor:** None

**pH:** < 0,5

**Vapor Pressure:** Not determined

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

**Boiling Point:** ~ 100 °C; ~ 212 °F

**Melting Point:** Not applicable

**Flash Point:** Not applicable

**Method:** Not applicable

**Autoignition Temperature:** Not applicable

**Flammability Limits:**

**Lower Explosion Limits:** Not applicable

**Upper Explosion Limits:** Not applicable

**Specific Gravity (water = 1):** 1,500

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

**Volatile Organic Compounds Content:** Not determined

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

**Solubility:**

**Water:** Miscible

**Acid:** Miscible

**Other:** Not determined

**Metal Corrosivity:**

**Steel:** 0,048 in/yr

**Aluminum:** Not determined

---

## 10. STABILITY / REACTIVITY

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

**Conditions to Avoid:** Exposure to light. Extreme temperatures. Heating to decomposition.

**Reactivity / Incompatibility:** May react violently in contact with: acetic acid, alkalis, chlorosulfonic acid, oxidizers, reducers.

**Hazardous Decomposition:** Contact with metals may release flammable hydrogen gas. Heating to decomposition releases toxic and/or corrosive fumes of: sulfur 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:** Sulfuric acid. Oral rat LD50 = 2140 mg/kg; Inhalation rat LC50 = 347 ppm/1 hour.

An ingredient of this mixture is: IARC Group 1: Recognized Carcinogen  
Sulfuric Acid - The IARC evaluation was based on exposure to the mist or vapor of concentrated sulfuric acid generated during chemical processes.

---

## 12. ECOLOGICAL INFORMATION

**Product Ecological Information:** --

No ecological data available for this product.

**Ingredient Ecological Information:** Sulfuric Acid: The 48-Hour TLm in flounder is 100-300 ppm.

---

## 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:** Sulphuric Acid

--

**ICAO Hazard Class:** 8

**ICAO Subsidiary Risk:** NA

**ICAO UN/ID Number:** UN1830

**ICAO Packing Group:** II

**I.M.O.:**

**I.M.O. Proper Shipping Name:** Sulphuric Acid

--

**I.M.O. Hazard Class:** 8

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

**I.M.O. UN Number:** UN1830

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

**A.D.R.:**

**A.D.R. Proper Shipping Name:** Sulphuric Acid

--

**A.D.R Hazard Class:** 8

**A.D.R. Subsidiary Risk:** NA

**A.D.R. UN-Number::** 1830

**A.D.R. Packing Group:** II

**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:** C - CORROSIVE

**R PHRASES:** R 35: Causes severe burns.

**S PHRASES:** S 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S 36/37/39: Wear suitable protective clothing, gloves and eye/face protection. S 45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

## 16. OTHER INFORMATION

**References:** Technical Judgment. In-house information. List of Dangerous Substances Classified in Annex I of the EEC Directive (67/548) - Classification, Packaging and Labeling of Dangerous Substances, Amended July 1992. CCINFO RTECS. Canadian Centre for Occupational Health and Safety. Hamilton, Ontario Canada: 30 June 1993. Fire Protection Guide on Hazardous Materials, 10th Ed. Quincy, MA: National Fire Protection Association, 1991. Sax, N. Irving. Dangerous Properties of Industrial Materials, 7th Ed. New York: Van Nostrand Reinhold Co., 1989. Air Contaminants, Federal Register, Vol. 54, No. 12. Thursday, January 19, 1989. pp. 2332-2983. TLV's Threshold Limit Values and Biological Exposure Indices for 1992-1993.

American Conference of Governmental Industrial Hygienists, 1992. IARC Monographs on the Evaluation of the Carcinogenic Risks to Humans. World Health Organization (Volumes 1-42) Supplement 7. France: 1987.

**R PHRASES:** R 35: Causes severe burns.

**Use of the substance/preparation:** Determination of sulfides

**Revision Summary:** Updates in Section(s) 14, 15,

---

### 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.**

**HACH COMPANY ©2007**

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

MSDS No: M00435

## SAFETY DATA SHEET

---

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product Name:** Sulfide 2 Reagent  
**Catalog Number:** 181732

HACH LANGE GmbH  
Willstätterstrasse 11  
40549 Düsseldorf, Germany  
+49-(0)211-52880

Emergency Telephone Numbers:  
(Poison Information Center Main)  
(+49 (0) 6131 19240) 24 HR

**SDS Number:** M00435

**Chemical Name:** Not applicable

**Chemical Formula:** Not applicable

**Chemical Family:** Not applicable

**Use of the substance/preparation:** Determination of sulfides

**CAS No.:** Not applicable

**Hazard:** Experimental mutagen. Experimental teratogen. May cause allergic reaction. Causes asthma  
Causes damage to the nasal epithelia and skin Causes lung cancer

**Date of MSDS Preparation:**

**Day:** 12

**Month:** April

**Year:** 2007

**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-  
(0)1-2515151

---

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

#### Demineralized Water

**EEC Number:** 2317912

**CAS No.:** 7732-18-5

**Percent Range:** > 99,0

**Percent Range Units:** weight / weight

**Ingredient EEC Symbol:** Not applicable

**Ingredient R phrase(s) (R phrase details given in Heading 16):** Not applicable

**TLV:** Not established

**PEL:** Not established

**EU Occupational Exposure Limits:** Not established

#### Potassium Dichromate

**EEC Number:** 2319066

**CAS No.:** 7778-50-9

**Percent Range:** 0,1 - 1,0

**Percent Range Units:** weight / weight

**Ingredient EEC Symbol:** T - TOXIC

**Ingredient R phrase(s) (R phrase details given in Heading 16):** R 49 R 46

**TLV:** 0.05 mg Cr<sup>6</sup>/m<sup>3</sup> (0,0235 ppm) Water-soluble  
**PEL:** 5 mg/mL (0,00235 ppm Cr<sup>+6</sup>), 8 Hr TWA; Action Level is 2,5 mg/mL<sup>3</sup> (0,00117 ppm), 8 Hr TWA  
**EU Occupational Exposure Limits:** 0,05 mg/mL (0.0235 ppm as Cr<sup>+6</sup>)

---

### 3. HAZARDS IDENTIFICATION

**Emergency Overview:**

**Appearance:** Clear, orange

**Odor:** None

**EU Symbols:** T - TOXIC

**R PHRASES:** R 49: May cause cancer by inhalation. R 46: May cause heritable genetic damage.

**Protective Equipment:**

**Potential Health Effects:**

**Eye Contact (EC):** May cause irritation

**Skin Contact (EC):** May cause irritation May cause allergic reaction

**Skin Absorption (EC):** Will be absorbed through the skin. Effects similar to those of ingestion

**Target Organs (SA E):** None Reported

**Ingestion (EC):** May cause: abdominal pain vomiting dizziness thirst fever coma liver damage

**Target Organs (Ing E):** None Reported

**Inhalation:** May cause: respiratory tract irritation

**Target Organs (Inh E):** None Reported

**Medical Conditions Aggravated:** Allergies or sensitivity to chromates or chromic acid. Pre-existing: Skin conditions

**Chronic Effects:** Chromate and dichromate salts may cause ulceration and perforation of the nasal septum, severe liver damage, central nervous system effects, and lung cancer.

**Cancer / Reproductive Toxicity Information:**

An ingredient of this mixture is: IARC Group 1: Recognized Carcinogen

Hexavalent Chromium Compounds

**Additional Cancer / Reproductive Toxicity Information:** Contains: an experimental mutagen. an experimental teratogen.

**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 plenty of water. Call physician if irritation develops.

**Ingestion (First Aid):** Give large quantities of water. Induce vomiting using syrup of ipecac or by sticking finger down throat. Never give anything by mouth to an unconscious person. Call physician immediately.

**Inhalation:** None required.

---

### 5. FIRE FIGHTING MEASURES

**Flammable Properties:** Material will not burn.

**Hazardous Combustion Products:** This material will not burn.

**Fire / Explosion Hazards:** May react violently with: hydrazine hydroxylamine reducers

**Static Discharge:** None reported.

**Mechanical Impact:** None reported

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

**Extinguishing Media NOT To Be Used:** Not applicable Not applicable

**Fire Fighting Instruction:** As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear. Evacuate area and fight fire from a safe distance. Water runoff can cause environmental damage. Dike and collect water used to fight fire.



---

## 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:** Releases of this material may contaminate the environment. Stop spilled material from being released to the environment.

**Clean-up Technique:** Cover spilled material with an alkali, such as soda ash or sodium bicarbonate. Scoop up slurry into a large beaker. Adjust to a pH between 6 and 9 with an alkali, such as soda ash or sodium bicarbonate. Dispose of material in an E.P.A. approved hazardous waste facility. Decontaminate the area of the spill with a soap solution.

**Evacuation Procedure:** Evacuate as needed to perform spill clean-up. If conditions warrant, increase the size of the evacuation.

---

## 7. HANDLING AND STORAGE

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

**Storage:** Keep container tightly closed when not in use. Store in a cool, dry place. Protect from: light

**Special Packaging Instructions:** Not applicable

**Use of the substance/preparation:** Determination of sulfides

---

## 8. EXPOSURE CONTROLS / PROTECTIVE EQUIPMENT

**Engineering Controls:** Maintain general industrial hygiene practices when using this product. Have an eyewash station nearby. Maintain adequate ventilation to keep exposure levels below the published exposure limits for chemicals in this product. Refer to the OSHA Standard at 29CFR1910.1026 for Cr (VI) (See Federal Register 28 February 2006 Page 10100.)

**Personal Protective Equipment:**

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

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

**Inhalation Protection:** adequate ventilation

**Precautionary Measures:** Avoid contact with: eyes skin Do not breathe: mist/vapor Wash thoroughly after handling. Use with adequate ventilation.

**TLV:** Not established. 0,05 mg/m<sup>3</sup> (as Cr<sup>+6</sup>)

**PEL:** Not established. 5 µg/m<sup>3</sup> (Cr<sup>+6</sup>), 8 Hr TWA; Action Level is 2,5 µg/m<sup>3</sup>, 8 Hr TWA.

**EU Occupational Exposure Limits:** Not established. 0,05 mg/m<sup>3</sup> (as Cr<sup>+6</sup>).

---

## 9. PHYSICAL / CHEMICAL PROPERTIES

**Appearance:** Clear, orange

**Physical State:** Liquid

**Odor:** None

**pH:** 4,2

**Vapor Pressure:** Not determined.

**Vapor Density (air = 1):** Not determined.

**Boiling Point:** ~ 100°C (~212°F)

**Melting Point:** Not applicable

**Flash Point:** Not determined.

**Method:** Not applicable

**Autoignition Temperature:** Not determined.

**Flammability Limits:**

**Lower Explosion Limits:** Not applicable

*Upper Explosion Limits:* Not applicable  
*Specific Gravity (water = 1):* 0,987  
*Evaporation Rate (water = 1):* Not determined.  
*Volatile Organic Compounds Content:* None.  
*Partition Coefficient (n-octanol / water):* Not applicable  
*Solubility:*  
*Water:* Miscible.  
*Acid:* Miscible.  
*Other:* Not determined.  
*Metal Corrosivity:*  
*Steel:* Not determined.  
*Aluminum:* Not determined.

---

## 10. STABILITY / REACTIVITY

*Chemical Stability:* Stable when stored under proper conditions.  
*Conditions to Avoid:* Extreme temperatures  
*Reactivity / Incompatibility:* May react violently in contact with: hydrazine hydroxylamine reducers  
*Hazardous Decomposition:* No hazardous decomposition products known.  
*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 Dichromate: Oral mouse LD<sub>50</sub> = 190 mg/kg; Oral human (child) LDLo = 26 mg/kg; Mutation and Reproductive Effects data reported in RTECS.

An ingredient of this mixture is: IARC Group 1: Recognized Carcinogen  
Hexavalent Chromium Compounds

---

## 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:** T - TOXIC

**R PHRASES:** R 49: May cause cancer by inhalation. R 46: May cause heritable genetic damage.

**S PHRASES:** S 53: Avoid exposure - obtain special instructions before use. S 37: Wear suitable gloves. S 45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

---

## 16. OTHER INFORMATION

**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. CCINFO RTECS. Canadian Centre for Occupational Health and Safety. Hamilton, Ontario Canada: 30 June 1993. Gosselin, R. E. et al. Clinical Toxicology of Commercial Products, 5th Ed. Baltimore: The Williams and Wilkins Co., 1984. IARC Monographs on the Evaluation of the Carcinogenic Risks to Humans. World Health Organization (Volumes 1-42) Supplement 7. France: 1987. List of Dangerous Substances Classified in Annex I of the EEC Directive (67/548) - Classification, Packaging and Labeling of Dangerous Substances, Amended July 1992. Sixth Annual Report on Carcinogens, 1991. U.S. Department of Health and Human Services. Rockville, MD: Technical Resources, Inc. 1991. Technical Judgment. The Merck Index, 11th Ed. Rahway, New Jersey: Merck and Co., Inc., 1989. TLV's Threshold Limit Values and Biological Exposure Indices for 1992-1993. American Conference of Governmental Industrial Hygienists, 1992. Vendor Information.

**R PHRASES:** R 49: May cause cancer by inhalation. R 46: May cause heritable genetic damage.

**Use of the substance/preparation:** Determination of sulfides

**Revision Summary:** Updates in Section(s) 1, 2, 3, 8,

---

**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.**

**HACH COMPANY ©2007**