

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

MSDS No: M00036

## MATERIAL SAFETY DATA SHEET

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Acid Reagent  
**Catalog Number:** 212699

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:** M00036  
**Chemical Name:** Disulfuric Acid, Dipotassium Salt  
**CAS No.:** 7790-62-7  
**Chemical Formula:** K<sub>2</sub>S<sub>2</sub>O<sub>7</sub>  
**Chemical Family:** Inorganic Salt  
**PIN:** NA  
**Intended Use:** Laboratory Reagent  
**Date of MSDS Preparation:**  
**Day:** 9  
**Month:** 05  
**Year:** 2005

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

**Potassium Pyrosulfate**  
**Percent Range:** 100.0  
**Percent Range Units:** weight / weight  
**CAS No.:** 7790627  
**LD50:** Oral rat LD50 = 2340 mg/kg  
**LC50:** None reported  
**TLV:** Not established  
**PEL:** Not established  
**Ingredient WHMIS Symbol:** Other Toxic Effects

### 3. HAZARDS IDENTIFICATION

**Emergency Overview:**  
**Appearance:** White powder  
**Physical State:** Solid  
**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.  
**Potential Health Effects:**

**Eye Contact:** Causes eye burns.  
**Skin Contact:** May cause irritation  
**Skin Absorption:** None Reported  
**Target Organs:** None Reported  
**Ingestion:** Causes: irritation of the mouth and esophagus  
**Target Organs:** None reported  
**Inhalation:** May cause: irritation of nose and throat  
**Target Organs:** None reported  
**Medical Conditions Aggravated:** None reported  
**Chronic Effects:** None reported  
**Cancer / Reproductive Toxicity Information:**  
IARC Listed: No

NTP Listed: No

**Additional Cancer / Reproductive Toxicity Information:** None reported  
**Toxicologically Synergistic Products:** None reported  
**WHMIS Hazard Classification:** Class D, Division 2, Subdivision B - Toxic material (other toxic effects)  
**WHMIS Symbols:** Other Toxic Effects

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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 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:** Can burn in fire, releasing toxic vapors.  
**Flash Point:** Not applicable  
**Method:** Not applicable  
**Flammability Limits:**  
**Lower Explosion Limits:** Not applicable  
**Upper Explosion Limits:** Not applicable  
**Autoignition Temperature:** Not determined  
**Hazardous Combustion Products:** Toxic fumes of: sulfur oxides.  
**Fire / Explosion Hazards:** May react violently with: strong bases strong reducers  
**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 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.  
**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:** Keep away from: reducers Protect from: moisture

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## 8. EXPOSURE CONTROLS / PROTECTIVE EQUIPMENT

**Engineering Controls:** Have an eyewash station 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 Protection:** 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

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## 9. PHYSICAL / CHEMICAL PROPERTIES

**Appearance:** White powder

**Physical State:** Solid

**Molecular Weight:** 254.0

**Odor:** Not determined

**pH:** of 5% solution = 1.0

**Vapor Pressure:** Not applicable

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

**Boiling Point:** Not applicable

**Melting Point:** 325°C 617°F

**Specific Gravity (water = 1):** 2.25

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

**Volatile Organic Compounds Content:** Not applicable

**Coefficient of Water / Oil:** Not available

**Solubility:**

**Water:** Soluble

**Acid:** Not determined

**Other:** Not determined

**Metal Corrosivity:**

**Steel:** Not Applicable

**Aluminum:** Not Applicable

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## 10. STABILITY / REACTIVITY

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

**Conditions to Avoid:** Excess moisture

**Reactivity / Incompatibility:** Incompatible with: strong bases reducers

**Hazardous Decomposition:** Heating to decomposition releases toxic and/or corrosive fumes of: sulfur oxides

**Hazardous Polymerization:** Will not occur.

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## 11. TOXICOLOGICAL INFORMATION

**Product Toxicological Data:**

**LD50:** Oral rat LD50 = 2340 mg/kg

**LC50:** None reported

**Dermal Toxicity Data:** None reported

**Skin and Eye Irritation Data:** None reported

**Mutation Data:** None reported

**Reproductive Effects Data:** None reported

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**Ingredient Toxicological Data: --**

Not applicable

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## 12. ECOLOGICAL INFORMATION

**Product Ecological Information:** --

No ecological data available for this product.

**Ingredient Ecological Information:** --

Not applicable

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## 13. DISPOSAL CONSIDERATIONS

**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. Allow cold water to run for 5 minutes to completely flush the system.

**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

**T.D.G.:**

**Proper Shipping Name:** Not Currently Regulated

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**Hazard Class:** NA

**PIN:** NA

**Group:** NA

**Subsidiary Risk:** 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

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## 15. REGULATORY INFORMATION

**National Inventories:**

**Canadian Inventory Status:** DSL Listed: Yes

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

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## 16. OTHER INFORMATION

**References:** TLV's Threshold Limit Values and Biological Exposure Indices for 1992-1993. American Conference of Governmental Industrial Hygienists, 1992. Technical Judgment. In-house information. CCINFO MSDS/FTSS. Canadian Centre for Occupational Health and Safety. Hamilton, Ontario Canada: 30 June 1993. Air Contaminants, Federal Register, Vol. 54, No. 12. Thursday, January 19, 1989. pp. 2332-2983. 29 CFR 1900 - 1910 (Code of Federal Regulations - Labor).

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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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