

The following list contains the Material Safety Data Sheets you requested. Please scroll down to view the requested MSDS(s).

<u>Product</u>	<u>MSDS</u>	<u>Distributor</u>	<u>Format</u>	<u>Language</u>	<u>Quantity</u>
245199	N/A	Hach Company	OSHA	English	1

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Total Enclosures: 1

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

MSDS No: M00039

# MATERIAL SAFETY DATA SHEET

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## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Potassium Persulfate  
**Catalog Number:** 245199

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:** M00039  
**Chemical Name:** Peroxydisulfuric Acid, Dipotassium Salt  
**CAS No.:** 7727-21-1  
**Chemical Formula:** K<sub>2</sub>S<sub>2</sub>O<sub>8</sub>  
**Chemical Family:** Oxidizing Agents  
**Hazard:** Causes severe eye irritation. Oxidizer. Allergen  
**Date of MSDS Preparation:**  
**Day:** 15  
**Month:** October  
**Year:** 2009

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## 2. COMPOSITION / INFORMATION ON INGREDIENTS

### Potassium Persulfate

**CAS No.:** 7727-21-1  
**TSCA CAS Number:** 7727-21-1  
**Percent Range:** 100.0  
**Percent Range Units:** weight / weight  
**LD50:** Oral Rat LD50 = 802 mg/kg  
**LC50:** None reported  
**TLV:** 5 mg/m<sup>3</sup>  
**PEL:** Not established  
**Hazard:** Causes severe eye irritation. Oxidizer. Allergen

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## 3. HAZARDS IDENTIFICATION

### **Emergency Overview:**

**Appearance:** White to light yellow crystals  
**Odor:** None  
CAUSES EYE AND RESPIRATORY TRACT IRRITATION  
MAY CAUSE ALLERGIC SKIN AND RESPIRATORY REACTIONS  
STRONG OXIDIZER: CONTACT WITH OTHER MATERIAL MAY CAUSE FIRE

### **HMIS:**

**Health:** 2  
**Flammability:** 0  
**Reactivity:** 0  
**Protective Equipment:** X - See protective equipment, Section 8.

### **NFPA:**

**Health:** 1  
**Flammability:** 0  
**Reactivity:** 0

**Symbol:** oxy

**Potential Health Effects:**

**Eye Contact:** Causes severe irritation

**Skin Contact:** May cause irritation May cause allergic reaction

**Skin Absorption:** None reported

**Target Organs:** None reported

**Ingestion:** May cause: gastrointestinal irritation

**Target Organs:** None reported

**Inhalation:** Causes: irritation of nose and throat May cause: allergic respiratory reaction

**Target Organs:** None reported

**Medical Conditions Aggravated:** Pre-existing: Allergies or sensitivity to potassium persulfate.

**Chronic Effects:** Chronic overexposure may cause allergic skin reactions allergic respiratory reactions

**Cancer / Reproductive Toxicity Information:**

O.S.H.A. Listed: No

IARC Listed: No

NTP Listed: No

**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 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:** Strong oxidizer. Contact with combustible materials may cause a fire. 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 determined

**Hazardous Combustion Products:** Toxic fumes of: sulfur oxides.

**Fire / Explosion Hazards:** May react violently with: strong reducers combustible materials

**Static Discharge:** None reported.

**Mechanical Impact:** None reported

**Extinguishing Media:** Water.

**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.

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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.

**Containment Technique:** Stop spilled material from being released to the environment. Cover spilled solid material with sand or other inert material.

**Clean-up Technique:** Remove all combustible materials from the spill area. Cover with an inert material, such as sand. Sweep up material. Incinerate material at an E.P.A. approved hazardous waste facility. 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.

*Special Instructions (for accidental release):* Mixture contains a component which is regulated as hazardous waste.  
*304 EHS RQ (40 CFR 355):* Not applicable  
*D.O.T. Emergency Response Guide Number:* 140

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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 oxidizable materials Protect from: moisture heat

*Flammability Class:* Not applicable

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## 8. EXPOSURE CONTROLS / PROTECTIVE EQUIPMENT

*Engineering Controls:* Have an eyewash station nearby. Use a fume hood to avoid exposure to dust, mist or vapor.

*Personal Protective Equipment:*

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

*Skin Protection:* lab coat disposable latex gloves

*Inhalation Protection:* laboratory fume hood

*Precautionary Measures:* Avoid contact with: eyes skin Do not breathe: dust Wash thoroughly after handling. Keep away from: oxidizable materials reducers

*TLV:* 5 mg/m<sup>3</sup>

*PEL:* Not established

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## 9. PHYSICAL / CHEMICAL PROPERTIES

*Appearance:* White to light yellow crystals

*Physical State:* Solid

*Molecular Weight:* 270.32

*Odor:* None

*pH:* of 5% solution = 4.1

*Vapor Pressure:* Not applicable

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

*Boiling Point:* Not applicable

*Melting Point:* Decomposes at >100°C or 212°F

*Specific Gravity (water = 1):* 2.477

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

*Volatile Organic Compounds Content:* 0.0%

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

*Solubility:*

*Water:* Soluble

*Acid:* Not determined

*Other:* Not determined

*Metal Corrosivity:*

*Steel:* 0.704 in/yr

*Aluminum:* 0.137 in/yr

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## 10. STABILITY / REACTIVITY

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

*Conditions to Avoid:* Excess moisture Exposure to air. Heating to decomposition.

*Reactivity / Incompatibility:* May react violently in contact with: oxidizable material 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 = 802 mg/kg

*LC50:* None reported

*Dermal Toxicity Data:* None reported

*Skin and Eye Irritation Data:* Testing showed only slight erythema to rabbit skin.  
*Mutation Data:* None reported  
*Reproductive Effects Data:* None reported  
*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

*EPA Waste ID Number:* D001  
*Special Instructions (Disposal):* Incinerate material at an E.P.A. approved hazardous waste facility.  
*Empty Containers:* Rinse three times with an appropriate solvent. Dispose of empty container as normal trash. Rinsate from empty containers may contain sufficient product to require disposal as hazardous waste.  
*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:* Potassium Persulfate  
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*DOT Hazard Class:* 5.1  
*DOT Subsidiary Risk:* NA  
*DOT ID Number:* UN1492  
*DOT Packing Group:* III  
*I.C.A.O.:*  
*I.C.A.O. Proper Shipping Name:* Potassium Persulphate  
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*ICAO Hazard Class:* 5.1  
*ICAO Subsidiary Risk:* NA  
*ICAO ID Number:* UN1492  
*ICAO Packing Group:* III  
*I.M.O.:*  
*I.M.O. Proper Shipping Name:* Potassium Persulphate  
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*I.M.O. Hazard Class:* 5.1  
*I.M.O. Subsidiary Risk:* NA  
*I.M.O. ID Number:* UN1492  
*I.M.O. Packing Group:* III

*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 Delayed (Chronic) Health Hazard Fire 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 RCRA regulated substances. See Section 13, EPA Waste ID Number.

**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):** Not applicable

**California Perchlorate Rule CCR Title 22 Chap 33:**

**Trade Secret Registry:** Not applicable

**National Inventories:**

**U.S. Inventory Status:** TSCA Listed: Yes

**TSCA CAS Number:** 7727-21-1

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## 16. OTHER INFORMATION

**Intended Use:** Laboratory Reagent

**References:** TLV's Threshold Limit Values and Biological Exposure Indices for 1992-1993. American Conference of Governmental Industrial Hygienists, 1992. The Merck Index, 11th Ed. Rahway, New Jersey: Merck and Co., Inc., 1989. Technical Judgment. Sax, N. Irving. Dangerous Properties of Industrial Materials, 7th Ed. New York: Van Nostrand Reinhold Co., 1989. List of Dangerous Substances Classified in Annex I of the EEC Directive (67/548) - Classification, Packaging and Labeling of Dangerous Substances, Amended July 1992. In-house information. 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. CCINFO RTECS. Canadian Centre for Occupational Health and Safety. Hamilton, Ontario Canada: 30 June 1993. 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).

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

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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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