

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

MSDS #: 647.00

Revision Date: April 28, 2011

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Potassium Persulfate

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

### SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

Potassium Persulfate

Synonym: potassium peroxydisulfate

CAS#: 7727-21-1

### SECTION 3 — HAZARDS IDENTIFICATION

White crystals. Odorless.

Moderately toxic by ingestion. Irritating to body tissues. Avoid all body tissue contact.

Possible sensitizer and allergen. Strong oxidizer, fire risk when in contact with combustible materials.

#### FLINN AT-A-GLANCE

Health-2

Flammability-0

Reactivity-3

Exposure-1

Storage-1

0 is low hazard, 3 is high hazard

### SECTION 4 — FIRST AID MEASURES

Call a physician and seek medical attention for further treatment, observation, and support after first aid.

Inhalation: Remove to fresh air at once. If breathing has stopped, give artificial respiration immediately.

Eye or External: Immediately flush with fresh water for at least 15 minutes.

Internal: Rinse mouth. Give large quantities of water for dilution. Call a physician or poison control at once.

### SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

Strong oxidizer. Liberates oxygen at 100 °C, fire risk when in contact with organic and combustible materials.

When heated to decomposition, emits toxic fumes of SO<sub>x</sub>.

**Fire Fighting Instructions:** Use triclass, dry chemical fire extinguisher. Firefighters should wear PPE and SCBA with full facepiece operated in positive mode.

#### NFPA CODE

None  
established

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from area. Sweep up, place in sealed bag or container and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

### SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #6. Store with bromates and chlorates.

Store in a cool dry place. Deliquescent, store in Flinn Chem-Saf Bag. Use and dispense in a hood.

### SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire).

Exposure guidelines: TWA 5 mg/m<sup>3</sup> (as S<sub>2</sub>O<sub>8</sub>)(ACGIH)

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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White odorless crystals.

Solubility: Soluble in water; insoluble in alcohol.

Formula:  $K_2S_2O_8$ 

Formula weight: 270.34

Melting point: Decomposes below 100 °C.

Specific gravity: 2.477

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**SECTION 10 — STABILITY AND REACTIVITY**

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Avoid heat, dry material decomposes above 100 C. Wet material decomposes at 50 C.

Avoid contact with strong reducers, finely powdered metals, strong bases, alcohols and hydrazine.

Shelf life: Fair to poor.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Irritant, possible sensitizer

Chronic effects: N.A.

Target organs: N.A.

ORL-RAT LD<sub>50</sub>: 802 mg/kgIHL-RAT LC<sub>50</sub>: N.A.SKN-RBT LD<sub>50</sub>: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

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**SECTION 12 — ECOLOGICAL INFORMATION**

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Data not yet available.

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**SECTION 13 — DISPOSAL CONSIDERATIONS**

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Please review all federal, state and local regulations that may apply, before proceeding.

Flinn Suggested Disposal Method #12a is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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Shipping name: Potassium Persulfate

Hazard class: 5.1, Oxidizer

UN number: UN1492

N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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TSCA-listed, EINECS-listed (231-781-8), RCRA code D001.

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**SECTION 16 — OTHER INFORMATION**

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**Consult your copy of the *Flinn Science Catalog/Reference Manual*  
for additional information about laboratory chemicals.**