

Potassium Persulfate Safety Data Sheet (SDS)

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Potassium Persulfate

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261
Chemrec Emergency Phone Number: (800) 424-10179

Signal Word
DANGER

SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Oxidizing solids (Category 3). May intensify fire; oxidizer (H1272). Keep away from heat, sparks, open flames, and hot surfaces. No smoking (P210).

Hazard class: Acute toxicity, oral (Category 4). Harmful if swallowed (H302). Do not eat, drink or smoke when using this product (P270).

Hazard class: Skin and serious eye damage, corrosion or irritation (Category 2, 2A). Causes skin and serious eye irritation (H315+H319).

Hazard class: Sensitization, skin or respiratory (Category 1). May cause an allergic skin reaction, asthma symptoms or breathing difficulties if inhaled (H1317+H1334). Avoid breathing dust or fumes (P261).

Hazard class: Specific target organ toxicity, single exposure; Respiratory tract irritation (Category 3). May cause respiratory irritation (H1335).

Pictograms



SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Potassium persulfate	7727-21-1	K ₂ S ₂ O ₈	270.33	
Synonyms: Potassium peroxydisulfate				

SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician (P311).

If inhaled: If breathing is difficult, remove victim to fresh air. Keep at rest in a position comfortable for breathing (P304+P341).

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). **If eye irritation persists eyes:** Get medical advice or attention (P337+P313).

If on skin: Rinse cautiously with water for several minutes (P351). Wash contaminated clothing before reuse (P363).

If swallowed: Rinse mouth. Call a POISON CENTER or physician if you feel unwell (P301+P330+P312).

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, may emit toxic fumes.

In case of fire: Use a tri-class dry chemical fire extinguisher.

NFPA Code
None established

SECTION 6 — ACCIDENTAL RELEASE MEASURES

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 chlorates, bromates, iodates, chlorites, perchloric acid, and peroxides.

Deliquescent. Store in a cool, dry place within a Flinn Chem-Saf™ bag. Keep away from combustible materials (P220). Take any precautions to avoid mixing with combustibles (P221).

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). In case of inadequate ventilation, wear respiratory protection (P285).

Exposure guidelines: (as persulfate) TLV 0.1 mg/m³ (ACGIH)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

White crystals. Odorless

Soluble: Water. Insoluble in alcohol.

Melting point: Decomposes below 100 °C.

Specific gravity: 2.477

SECTION 10 — STABILITY AND REACTIVITY

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, deliquescent. See Section 7 for further information.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Serious eye irritation, skin and respiratory tract irritant, sensitizer, may cause allergy or asthma symptoms if inhaled.

Chronic effects: N.A.

Target organs: Eyes, skin, mucous membranes.

ORL-RAT LD₅₀: 802 mg/kg

IHL-RAT LC₅₀: N.A.

SKN-RBT LD₅₀: N.A.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

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

Flinn Suggested Disposal Method #12a is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Potassium Persulfate. Hazard class: 5.1, Oxidizer. UN number: UN1492.

SECTION 15 — REGULATORY INFORMATION

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

SECTION 16 — OTHER INFORMATION

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

N/A = Not applicable

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