

Safety Data Sheet (SDS)

8/6/2024: File reviewed, more current MSDS/SDS not available. CAS

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Potassium Chlorate

Signal Word
DANGER

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

Chemtrec Emergency Phone Number: (800) 424-10145

Pictograms

SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Oxidizing liquids (Category 1). May cause fire or explosion; strong oxidizer (H271). Do not spray on an open flame or other ignition source (P211).



Hazard class: Acute toxicity, oral and inhalation (Category 4). Harmful if swallowed or inhaled (H302+H332). Do not eat, drink or smoke when using this product (P270). Avoid breathing dust or fumes (P261).



Hazard class: Skin corrosion or irritation (Category 3). Causes mild skin irritation (H316).

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Potassium chlorate	698078	KClO ₃	122.56	
Synonyms: Chloric acid, potassium salt				

SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell (P312).

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P340).

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 skin irritation occurs: Get medical advice or attention (P332+P313).

If swallowed: Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid. Strong oxidizer. Forms explosive mixtures with combustible materials. If only slightly contaminated, will explode when exposed to moderate shock or when heated. When heated to decomposition, may emit toxic fumes.
In case of fire: Use a tri-class dry chemical fire extinguisher.

NFPA Code
H-1
F-0
R-1
OX

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 chlorates, bromates, iodates, chlorites, perchloric acid, and peroxides. Forms explosive mixtures with combustible materials. If only slightly contaminated, will explode when exposed to moderate shock or when heated. Keep container tightly closed. Keep and store away from clothing and combustible materials (P220). Use only in a hood or well-ventilated area (P271).

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection. Wash hands thoroughly after handling (P264). Use only in a hood or well-ventilated area (P271).

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

White crystals or powder. Odorless.	Melting point: 368 °C
Soluble: Boiling water	Specific gravity: 2.337

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with reducers, finely powdered metals, strong acids, alcohols, organic materials, and other combustible materials.

Shelf life: Indefinite, if stored safely. See Section 7 for further information.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Irritant	ORL-RAT LD ₅₀ : 1870 mg/kg
Chronic effects: Anemia	IHL-RAT LC ₅₀ : N.A.
Target organs: Blood, liver, kidneys	SKN-RBT LD ₅₀ : 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 Chlorate; Hazard class: 5.1, Oxidizer; UN number: UN1485

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (223-289-7), RCRA code D001, D003.

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.

Revision Date: July 21, 2015
