KM00691 POTASSIUM CHLORATE
SDS No.: PP0440 10032 • SAFETY DATA SHEET

OXIDIZER STORAGE CODE YELLOW

Section 1 Chemical Product and Company Information

Nasco
901 Janesville Ave.
P.O. Box 901
Fort Atkinson, WI 53538-0901

CHEMTREC 24 Hour Emergency
Phone Number (800) 424-9300
For laboratory use only.
Not for drug, food or household use.

Product	POTASSIUM CHLORATE
Synonyms	Chlorate of Potash ; Chloric Acid, Potassium Salt ; Potassium Oxymuriate

Section 2 Hazards Identification

Signal word: DANGER
Pictograms: GHS03 / GHS07 / GHS09
Target organs: Liver, Kidneys, Blood

GHS Classification:
Oxidizing solid (Category 1)
Acute toxicity, oral (Category 4)
Acute toxicity, inhalation (Category 4)
Aquatic, chronic (Category 2)

GHS Label information: Hazard statement:
H271: May cause fire or explosion; strong oxidizer.
H302: Harmful if swallowed.
H332: Harmful if inhaled.
H411: Toxic to aquatic life with long lasting effects.

Precautionary statement:
P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P220: Keep away from clothing/incompatible/combustible materials.
P221: Take any precaution to avoid mixing with combustibles/acids/oxidizers.
P261: Avoid breathing dust.
P264: Wash hands thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P271: Use only outdoors or in a well-ventilated area.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P283: Wear fire/flame resistant/retardant clothing.
P301+P330+P312: IF SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor if you feel unwell.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P306+P360: IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
P312: Call a POISON CENTER or doctor if you feel unwell.
P371+P380+P375: In case of fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.
P370+P378: In case of fire: Use water to extinguish.
P391: Collect spillage.
P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Ca Prop 65 - This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%	EINECS
Potassium chlorate	3811-04-9	99.7%	223-289-7

Section 4 First Aid Measures

INGESTION: HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: HARMFUL IF INHALED. CAUSES RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: CAUSES EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: MAY BE HARMFUL IF ABSORBED THROUGH SKIN. CAUSES SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media: Use water. Do not use dry chemicals or foams. CO_2 or Halon® may provide limited control.
Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.
Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Substance is a strong oxidizer which releases oxygen on heating. Forms explosive mixtures with combustible, organic, reducing agents or other easily oxidizable materials. Explodes with sulfuric acid or ammonium chloride. These mixtures are easily ignited with friction or heat.

Section 6 Accidental Release Measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Remove all sources of ignition. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

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Section 7 Handling & Storage

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from ignition sources.

Section 8 Exposure Controls / Personal Protection

Exposure Limits:

Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Particles not otherwise classified	Not established	TWA: 15 mg/m^3 total dust	Not established

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

Section 9 Physical & Chemical Properties

Appearance: Solid. White, crystalline powder
Odor: No odor.
Odor threshold: Data not available.
pH: Data not available.
Melting / Freezing point: 368°C (694°F)
Boiling point: 400°C (752°F)
Flash point: Non-combustible
Evaporation rate (= 1): Not applicable
Flammability (solid/gas): Data not available.
Explosion limits: Lower / Upper: Not applicable
Vapor pressure (mm Hg): Negligible
Vapor density (Air = 1): Data not available
Relative density (Specific gravity): 2.34
Solubility(ies): Soluble in water.
Partition coefficient: Data not available
Auto-ignition temperature: Data not available
Decomposition temperature: Data not available.
Viscosity: Data not available.
Molecular formula: $KClO_3$
Molecular weight: 122.55

Section 10 Stability & Reactivity

Chemical stability: Stable
Hazardous polymerization: Will not occur.
Conditions to avoid: Excessive temperatures, heat, sparks, open flame and other sources of ignition.

Incompatible materials: Ammonia, combustible materials, strong reducing agents, finely powdered metals, alcohols, strong acids, sulfur and metal-sulfur compounds, sugars and metal-phosphorous compounds.

Hazardous decomposition products: Chlorine, oxygen, potassium oxides.

Section 11 Toxicological Information

Acute toxicity: Oral-rat LD50: 1870 mg/kg ; Dermal-rabbit LDo: >2000
Skin corrosion/irritation: Skin-rabbit - Slight irritant.
Serious eye damage/irritation: Eyes-rabbit - Moderate irritant.
Respiratory or skin sensitization: Data not available
Germ cell mutagenicity: Data not available
Carcinogenity: Data not available
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity: Data not available
STOT-single exposure: Data not available
STOT-repeated exposure: Data not available
Aspiration hazard: Data not available
Potential health effects:
Inhalation: Inhalation may cause cough, sore throat.
Ingestion: Ingestion causes abdominal pain, cyanosis, confusion, convulsions, diarrhea, dizziness, headache, nausea, shortness of breath, sore throat, unconsciousness, vomiting. Substance can be absorbed into the body by ingestion. Symptoms may be delayed.
Skin: Contact with skin causes redness.
Eyes: Contact with eyes causes redness and pain.
Signs and symptoms of exposure: The substance may cause effects on the blood and kidneys. This may result in lesions of blood cells, kidney impairment and formation of methaemoglobin. The effects may be delayed.
Additional information: RTECS #: FO0350000

Section 12 Ecological Information

Toxicity to fish: Oncorhynchus mykiss (fish, fresh water), LC50 = 2750 mg/L/48 hours
Toxicity to daphnia and other aquatic invertebrates: Daphnia magna (Crustacia), LC50 = 880 mg/L/24 hours
Toxicity to algae: Chlorella vulgaris (Algae) = 424 mg/L
Persistence and degradability: No data available
Bioaccumulative potential: No data available
Mobility in soil: No data available
PBT and vPvB assessment: No data available
Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13 Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Section 14 Transport Information

UN/NA number: UN1485 **Shipping name:** Potassium chlorate
Hazard class: 5.1 **Packing group:** II **Reportable Quantity:** No **Marine pollutant:** No
Exceptions: Limited quantity equal to or less than 1 Kg **2012 ERG Guide #** 140

Section 15 Regulatory Information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the inventory list

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	WHMIS Classification
Potassium chlorate	Listed	Not listed	D001 ; D003	Listed	Not listed	 C

Section 16 Additional Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program; IARC: International Agency for Research on Cancer; OSHA: Occupational Safety and Health Administration; STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure; ERG: Emergency Response Guidebook

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