



Material Safety Data Sheet

Product Name: Potassium Iodate (FCC Grade)

Section 1-Product Information

Formula : KIO₃
Molecular weight : 214.00
CAS No : 7758-05-6
HS Code : 28299003
Synonym's : Iodic acid, potassium salt

Section 2-Composition, Information on Ingredients

Ingredient : Potassium Iodate
Hazardous : Yes
Percent : 100%
Appearance : White Crystalline Powder

Section 3-Hazards Identification

Emergency Overview

Danger! Strong oxidizer. Contact with other material may cause fire. Harmful if swallowed or inhaled. Causes irritation to skin, eyes and respiratory tract. May affect central nervous system, blood, and kidneys.

Health Rating : 1 – Slight
Flammability Rating : 0 – None
Reactivity Rating : 3 – Severe (Oxidizer)
Contact Rating : 2 – Moderate
Lab protective Equip : Goggles, Lab coat
Storage Color Code : Yellow (Reactive)

Potential Health Effects

Eye contact : No adverse effects expected but dust may cause mechanical irritation.

Skin contact: Possible irritation or reddening of moist skin on prolonged contact.

Ingestion : May cause gastrointestinal upset with symptoms of abdominal pain, vomiting, and diarrhea. Animal experiments suggest a potential for kidney and blood cell damage, similar to that of the bromates and chlorates.

Inhalation : May irritate the respiratory tract, with symptoms of coughing and possible shortness of breath.

Chronic Exposure: Repeated ingestions may cause kidney dysfunction of failure and blood conditions such as hemolysis. Central nervous system may be affected.

Aggravation of Pre-existing conditions: Persons with impaired liver or kidney function may be more susceptible to the effects of this substance.

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Section 4-First Aid Measure

Eye contact : Wash thoroughly with running water. Get medical advice if irritation develops.

Skin contact : Wash exposed area with soap and water. Get medical advice if irritation develops.

Ingestion : Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person.

Inhalation : Remove to fresh air. Get medical attention for any breathing difficulty.

Section 5-Fire fighting procedure

Fire : Not combustible but enhances the combustion of other substances. Strong oxidizing agent, can release gaseous oxygen when heated.

Explosion: May explode when exposed to mechanical shock or friction or can cause explosions with combustible or flammable materials or powdered metals.

Fire Extinguishing Media: Use any means suitable for extinguishing surrounding fire.

Special Information : In the event of a fire, wear full protective clothing and NIOSH-approved self contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. Water spray may be used to keep fire exposed containers cool.

Section 6-Accidental Release Measure

Remove all sources of ignition. Ventilate area of leak or spill. Wear appropriate personal protective equipments as specified in section 8.

Spills: Clean up spill in a manner that does not disperse dust into the air. Use non-sparking tools and equipments. Reduce airborne dust and prevent scattering by moistening with water. Pick up spill for recovery or disposal and place in a closed container.

Section 7-Handling and Storage

Store in a tightly closed container. Store in a cool, dry, ventilated area away from sources of heat, moisture, and incompatible substance. Protect container from physical damage. Avoid dust formation and control ignition sources. Employ grounding, venting and explosion relief provisions in accord with accepted engineering practices in any process capable of generating dust and/or static electricity. Empty only into inert or non-flammable atmosphere. Emptying contents into a non-inert atmosphere where flammable vapors may be present could cause a flash fire or explosion due to electrostatic discharge. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.



Section 8-Exposure control/Personal protection

Airborne Exposure Limits: None established.

Ventilation system: A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the *ACGIH document, Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved): For conditions of use where exposure to the dust or mist is apparent, a half-face dust/mist respirator may be worn. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. **WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection: Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eye Protection: Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

Section 9-Physical Chemical Properties

Appearance	: White crystalline powder
Odour	: Odourless
Solubility	: 32 g in 100cc @ 100°C
Density	: 3.89
pH	: No information found
% Volatiles by volume @ 21 C (70F)	: 0
Boling Point	: Not applicable
Melting Point	: 560 °C (1040°F) (partial decomposition)
Vapour Density (Air=1)	: No information found
Vapour Pressure (mm Hg)	: No information found
Evaporation Rate (BuAC=1)	: No information found

Section 10-Stability and Reactivity

Stability: Stable under ordinary conditions of use and storage. Storage oxidizing characteristics appear when mixed with acid solutions.

Hazardous Decomposition products: Burning may produce toxic iodine vapors.

Hazardous Polymerization : Will not occur

Incompatibilities: Reacts violently with combustible and reducing materials; aluminium, organic compounds, carbon, hydrogen peroxide, sulfides.

Conditions to avoid: Heat, shock, friction, incompatibles.



Section 11-Toxicity Information

No LD50/LC50 information found relating to normal routes of occupational exposure.

-----\Cancer Lists\-----

-----NTP Carcinogen----

Ingredient	Known	Anticipated	IARC Category
Potassium Iodate (7758-05-6)	No	No	None

Section 12-Ecological Information

Environmental Fate : No information found

Environmental Toxicity : No information found

Section 13-Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Although not a listed RCRA hazardous waste, this material may exhibit one or more characteristics of a hazardous waste and require appropriate analysis to determine specific disposal requirements. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

Section 14-Transport Information

Domestic (Land, D.O.T.)

Proper Shipping Name: OXIDIZING SOLID, N.O.S. (POTASSIUM IODATE)

Hazard Class: 5.1

UN/NA: UN1479

Packing Group: II

Information reported for product/size: 2.5KG

International (Water, I.M.O.)

Proper Shipping Name: OXIDIZING SOLID, N.O.S. (POTASSIUM IODATE)

Hazard Class: 5.1

UN/NA: UN1479

Packing Group: II

Information reported for product/size: 2.5KG



Section 15-Regulatory Information

-----\Chemical Inventory Status - Part 1\-----

Ingredient	TSCA	EC	Japan	Australia
Potassium Iodate (7758-05-6)	Yes	Yes	Yes	Yes

-----\Chemical Inventory Status - Part 2\-----

Ingredient	--Canada--	Korea	DSL	NDSL	Phil.
Potassium Iodate (7758-05-6)	Yes	Yes	No	Yes	

-----\Federal, State & International Regulations - Part 1\-----

Ingredient	-SARA 302- RQ	TPQ	-----SARA 313----- List	Chemical Catg.
Potassium Iodate (7758-05-6)	No	No	No	No

-----\Federal, State & International Regulations - Part 2\-----

Ingredient	CERCLA	-RCRA- 261.33	-TSCA- 8(d)
Potassium Iodate (7758-05-6)	No	No	No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No
 SARA 311/312: Acute: Yes Chronic: Yes Fire: No Pressure: No
 Reactivity: Yes (Pure / Solid)

Australian Hazchem Code: 1WE
Poison Schedule: No information found.
WHMIS:

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.



Section 16-Additional Information

NFPA Ratings: Health: **1** Flammability: **0** Reactivity: **1** Other: **Oxidizer**

Label Hazard Warning:

DANGER! STRONG OXIDIZER. CONTACT WITH OTHER MATERIAL MAY CAUSE FIRE. HARMFUL IF SWALLOWED OR INHALED. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. MAY AFFECT CENTRAL NERVOUS SYSTEM, BLOOD, AND KIDNEYS.

Label Precautions:

Keep from contact with clothing and other combustible materials.
Store in a tightly closed container.
Use only with adequate ventilation.
Remove and wash contaminated clothing promptly.
Wash thoroughly after handling.
Avoid contact with eyes, skin and clothing.
Avoid breathing dust.

Label First Aid:

If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. In all cases, get medical attention.

Product Use:

Laboratory Reagent.

Revision Information:

No changes.

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