



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name POTASSIUM IODATE, REAGENT (ACS)
Catalog # 79
Version # 02
Revision date 04-Sep-2009
CAS # 7758-05-6
Manufacturer information GFS Chemicals, Inc.
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2. Hazards Identification

Emergency overview DANGER -- OXIDIZER
Contact with combustible material may cause fire.

Irritating to eyes, respiratory system and skin. Exposure to powder or dusts may be irritating to eyes, nose and throat.

OSHA regulatory status This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

Potential health effects

Routes of exposure Inhalation. Skin contact. Eye contact.

Eyes Dust or powder may irritate eye tissue. Avoid contact with eyes.

Skin May irritate skin and mucous membranes. Avoid contact with the skin.

Inhalation Inhalation of dusts may cause respiratory irritation. Avoid breathing dust/fume/gas/mist/vapors/spray.

Ingestion Expected to be a low ingestion hazard.

Potential environmental effects Ecological injuries are not known or expected under normal use.

3. Composition / Information on Ingredients

Components	CAS #	Percent
POTASSIUM IODATE	Mixture	90 - 100

4. First Aid Measures

First aid procedures

Eye contact Flush eyes immediately with large amounts of water. If a contact lens is present, DO NOT delay irrigation or attempt to remove the lens. Continue rinsing. Get medical attention immediately.

Skin contact Remove and isolate contaminated clothing and shoes. Before washing use a dry brush to remove dust from skin. Wash off immediately with plenty of water. Get medical attention immediately.

Inhalation If gas/fume/vapor/dust/mist from the material is inhaled, remove the affected person immediately to fresh air. For breathing difficulties, oxygen may be necessary. Get medical attention, if needed.

Ingestion Rinse mouth. Give victim water or milk. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting without advice from poison control center. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Seek medical attention.

General advice Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire Fighting Measures

Flammable properties Contact with combustible material may cause fire. These substances will accelerate burning when involved in a fire. Runoff may create fire or explosion hazard.

Extinguishing media

Suitable extinguishing media Water.

Protection of firefighters

Protective equipment and precautions for firefighters Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Do not move cargo or vehicle if cargo has been exposed to heat. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also consider initial evacuation for 800 meters (1/2 mile) in all directions. ALWAYS stay away from tanks engulfed in flame. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Move containers from fire area if you can do so without risk. In the event of fire, cool tanks with water spray. Use water spray to cool unopened containers. Cool containers exposed to flames with water until well after the fire is out. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Specific methods In the event of fire, cool tanks with water spray. Use water spray to cool unopened containers.

6. Accidental Release Measures

Personal precautions Keep unnecessary personnel away. Isolate spill or leak area immediately for at least 50 to 100 meters (150 to 330 feet) in all directions. Keep upwind. Keep out of low areas. Keep people away from and upwind of spill/leak. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of dust from the spilled material. Wear a dust mask if dust is generated above exposure limits.

Environmental precautions Runoff from fire control or dilution water may cause pollution.

Methods for containment Stop leak if you can do so without risk. Keep combustibles (wood, paper, oil, etc.) away from spilled material. If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Prevent entry into waterways, sewer, basements or confined areas.

Methods for cleaning up Dilute with water. Collect dust using a vacuum cleaner equipped with HEPA filter. Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation. Collect large spills for disposal as oxidizing waste.

7. Handling and Storage

Handling DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Keep away from clothing and other combustible materials. Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Avoid contact with skin. Avoid contact with eyes. Wear personal protective equipment. In case of insufficient ventilation, wear suitable respiratory equipment. Wash thoroughly after handling.

Storage Store in a well-ventilated place. Keep container tightly closed. Do not store near combustible materials. Guard against dust accumulation of this material. Use care in handling/storage.

8. Exposure Controls / Personal Protection

Engineering controls Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits. Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Respiratory protection Respirator must be worn if exposed to dust. Avoid breathing dust/fume/gas/mist/vapors/spray.

Hand protection Rubber gloves.

Eye / face protection Wear chemical goggles.

Skin protection	Avoid contact with the skin. Wear chemical protective equipment that is specifically recommended by the manufacturer. Wear suitable protective clothing. Wear protective gloves.
General hygiene considerations	When using do not smoke. Do not breathe dust. Avoid contact with eyes. Avoid contact with skin. Handle in accordance with good industrial hygiene and safety practice.
General	Avoid contact with skin. Avoid contact with eyes.

9. Physical & Chemical Properties

Appearance	Crystalline powder.
Color	White.
Odor	Odorless.
Odor threshold	Not available.
Physical state	Solid.
Form	Solid.
pH	5 - 8 (5% aqueous solution)
Melting point	1040 °F (560 °C) estimated
Freezing point	1040 °F (560 °C)
Boiling point	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Specific gravity	3.89
Relative density	3.89 g/cm ³
Solubility (water)	soluble
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Molecular weight	214.0200 g/mol
Molecular formula	KIO ₃

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions. Oxidizing material.
Incompatible materials	Combustible material. Contact with certain reducing agents may release iodine.
Hazardous decomposition products	Iodine gas.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Acute effects

Acute Toxicity other routes: LD 50

POTASSIUM IODATE Mixture Mouse 136 mg/kg Intraperitoneal

Toxicology data for the preparation

Acute LDLO: 531 mg/kg, Mouse, Oral
Acute LD50: 136 mg/kg, Mouse, Other

Local effects Irritating to respiratory system. Irritating to eyes. Irritating to skin. Inhalation of dusts may cause respiratory irritation.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

12. Ecological Information

Ecotoxicity This product has no known eco-toxicological effects.

Persistence and degradability Not available.

13. Disposal Considerations

Waste codes D001: Waste Flammable material with a flash point <140 F

Disposal instructions Dispose of this material and its container to hazardous or special waste collection point. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose in accordance with all applicable regulations.

14. Transport Information

DOT

Basic shipping requirements:

Proper shipping name Oxidizing solid, n.o.s.

Hazard class 5.1

UN number UN1479

Packing group III

Additional information:

Special provisions IB8, IP3, T1, TP33

Packaging exceptions 152

Packaging non bulk 213

Packaging bulk 240

ERG number 140



15. Regulatory Information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

CERCLA/SARA Hazardous Substances - Not applicable.

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of New and Existing Chemicals (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

16. Other Information

Further information

HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings

Health: 2
Flammability: 0
Physical hazard: 1

NFPA ratings

Health: 0
Flammability: 0
Instability: 1
Special hazards: OX

Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Issue date

04-Sep-2009

This data sheet contains changes from the previous version in section(s):

This document has undergone significant changes and should be reviewed in its entirety.