

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name	Potassium iodate
CAS number	7758-05-6
Synonyms	Iodic acid, potassium salt.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Laboratory chemicals
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1.3 Details of the supplier of the safety data sheet

Company	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC


SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Oxidizing solids
Acute oral toxicity
Skin Corrosion/Irritation
Serious Eye Damage/Eye Irritation
Specific target organ toxicity (single exposure)
Target Organs - Respiratory system

2.2 GHS Label elements, including precautionary statements

Pictogram	
Signal Word	Danger
Hazard statements	May intensify fire; oxidizer. Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.
Precautionary statements	
Prevention	Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fumes/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Keep away from heat/sparks/open flames/hot surface. No smoking. Keep/Store away from clothing/other combustible materials. Take any precaution to avoid mixing with combustibles.
Inhalation	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
Skin	IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
Eyes	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.
Fire	In case of fire: Use CO ₂ , dry chemical, or foam for extinction.
Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Disposal	Dispose of contents/container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None identified

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Potassium iodate	Iodic acid, potassium salt.	7758-05-6	98%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled	Remove to fresh air. Get medical attention immediately if symptoms occur. If not breathing, give artificial respiration.
In case of skin contact	Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.
In case of eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
If swallowed	Do NOT induce vomiting. Call a physician or poison control center immediately.

4.2 Most important symptoms and effects, both acute and delayed

Irritating to eyes. Irritating to skin. May cause central nervous system depression: May cause adverse kidney effects.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Flooding quantities of water.

Unsuitable extinguishing media No information available

5.2 Specific hazards arising from the substance or mixture

Oxidizer: Contact with combustible/organic material may cause fire. Containers may explode when heated. Risk of explosion by shock, friction, fire or other sources of ignition. Runoff to sewer may create fire or explosion hazard. May ignited combustible (wood paper, oil, clothing, etc).
Hazardous combustion products: Hydrogen iodide, potassium oxides.

5.3 Special protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

5.4 Further information

Flash Point No information available

Autoignition Temperature

No information available

Explosion limits

Upper

No data available

Lower

No data available

Sensitivity to Mechanical Impact

No information available

Sensitivity to Static Discharge

No information available

NFPA

Health	Flammability	Instability	Physical hazards
2	0	0	OX

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation. Keep people away from and upwind of spill/leak. Do not get in eyes, on skin, or on clothing. Do not subject to grinding/shock/friction. Keep combustibles (wood, paper, oil, etc) away from spilled material.

6.2 Environmental precautions

See section 12 for additional ecological information.

6.3 Methods and materials for containment and cleaning up

Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Keep in suitable, closed containers for disposal. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.

6.4 Reference to other sections

See section 2 for full list of hazard and precaution statements.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions on safe handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid dust formation. Do not subject to grinding, shock, friction. Keep away from clothing and other combustible materials. Do not get in eyes, on skin, or on clothing. Do not breathe dust. Do not ingest. If swallowed then seek immediate medical assistance.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Do not store near combustible materials. Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible materials. Organic materials. Strong oxidizing agents. Sulfides. Peroxides. Metals. Reducing agent. Strong reducing agents. Combustible material.

Incompatibilities

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Biological occupational exposure limits

No information available.

8.2 Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Eye/face protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN 166.

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Control of environmental exposure

No information available

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State

Powder Solid

Appearance	Off-white
Odor	Odorless
Odor Threshold	No information available
pH	No information available
Melting Point/Range	560 °C / 1040 °F
Boiling Point/Range	No information available
Evaporation Rate	No information available
Flammability (solid)	No information available
Flammability or explosive limit	
Upper	No data available
Lower	No data available
Vapor Pressure	No information available
Vapor Density	No information available
Density	3.930
Solubility	Soluble
Partition coefficient; n-octanol/water	No data available
Autoignition Temp	No information available
Decomposition Temp	No information available
Viscosity	No information available
Molecular Formula	I K O3
Molecular Weight	214.001
VOC Content(%)	No information available
Oxidizing properties	Oxidizer

9.2 Other safety information

No information available

SECTION 10: Stability and reactivity

10.1 Reactivity

Yes

10.2 Chemical stability

Oxidizer: Contact with combustible/organic material may cause fire.

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to avoid

Excess heat. Incompatible products. Combustible material.

10.5 Incompatible materials

Organic materials, strong oxidizing agents, sulfides, peroxides, metals, reducing agent, strong reducing agents, combustible material.

10.6 Hazardous decomposition products

Hydrogen iodide, potassium oxides.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium iodate	-	> 2000 mg/kg (rat)	-

Skin corrosion/irritation

Irritating to skin.

Serious eye damage/eye irritation

Irritating to eyes.

Respiratory or skin sensitization

No information available

Germ cell mutagenicity

No information available

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Potassium iodate	7758-05-6	Not listed	Not listed	Not listed	Not listed	Not listed

Specific target organ toxicity - single exposure

Respiratory system

Specific target organ toxicity - repeated exposure

None known

Reproductive toxicity

No information available

Chronic effects

No information available

11.2 Additional Information

No information available.

SECTION 12: Ecological information

12.1 Toxicity

Do not empty into drains.

12.2 Persistence and degradability

Soluble in water, persistence is unlikely based on information available.

12.3 Bio accumulative potential

No information available

12.4 Mobility in soil

Will likely be mobile in the environment due to its water solubility.

12.5 Results of PBT and vPvB assessment

No information available

12.6 Endocrine disrupting properties

No information available

12.7 Other adverse effects

No information available

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport information

DOT (US)

UN-No	UN1479
Proper Shipping Name	OXIDIZING SOLID, N.O.S.
Hazard Class	5.1
Packing Group	II

IMDG

UN-No	UN1479
Proper Shipping Name	OXIDIZING SOLID, N.O.S.
Hazard Class	5.1
Packing Group	II

IATA

UN-No	UN1479
Proper Shipping Name	OXIDIZING SOLID, N.O.S.
Hazard Class	5.1
Packing Group	II

SECTION 15: Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

See section 2 for more information.

SARA 313 (TRI reporting)

Not regulated

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Not listed

US state regulations

US. Massachusetts RTK - Substance List

Not listed

US. New Jersey Worker and Community Right-to-Know Act

Not listed

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed

California Proposition 65

Not listed

SECTION 16: Other information

Issue date: 09/22/2009
Revision 1: 12/24/2021
Revision 2: 08/16/2024

SECTION 17: Disclaimer

The information provided on 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.