

Safety Data Sheet

1. Product and Company Identification

Product Name:	Potassium Iodide Crystals
Product Use(s):	Industrial manufacturing, Food Supplement
Manufacturer/Seller:	Lab Alley LLC
Address:	22111 Highway 71 West, Suite 601, Spicewood, Texas 78669
Emergency Telephone:	Infotrac: 800-535-5053
E-mail:	customerservice@laballey.com

2. Hazards Identification

GHS Classification

Eye irritation	(Category 2B)
Specific target organ toxicity	(Category 1) Oral, Thyroid

GHS Label elements, including precautionary statements

Signal Word	Warning
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Hazard statement(s)

H320	Causes eye irritation
H372	Causes damage to organs (Thyroid) through prolonged or repeated exposure if swallowed.

Precautionary statement(s)

P264	Wash thoroughly after handling.
P280	Wear protective gloves/ eye protection/ face protection.
P270	Do not eat, drink or smoke when using this product.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice/ attention.

HMIS Classification

Health hazard:	2
Chronic Health Hazard: *	
Flammability:	0
Physical hazards:	0

Potential Health Effects

Inhalation:	May be harmful if inhaled.
Skin:	May cause skin irritation.
Eyes:	May cause eye irritation.
Ingestion:	May be harmful if swallowed.

3. Composition Information

Chemical Name: Potassium Iodide

Chemical Formula: KI

Molecular weight: 166.00 g/mol

CAS-No.	EC-No.	Concentration
7681-11-0	231-659-4	≥98% w/w

OSHA PEL: Not Established

ACGIH TLV: Not Established

4. First Aid Measures

General Advice

Move out of dangerous area. Consult a physician. Show this safety data sheet to the attending doctor.

Inhalation

Move victim to fresh air. Seek medical attention if breathing is distressed. If not breathing, administer artificial respiration.

Skin Contact

Wash exposed area thoroughly with soap and water. Seek medical attention if irritation persists.

Eye Contact

Immediately flush eyes with water for 5 minutes. Remove contact lenses, if present, and flush eyes with water for an additional 10 minutes. Seek medical attention if irritation persists.

Ingestion

Do not induce vomiting. Thoroughly rinse mouth with water. Drink a large amount of water. Consult a physician.

5. Firefighting Measures

Extinguishing Media

Water, Alcohol-Resistant Foam, Dry-Chemical, or Carbon Dioxide (CO₂)

Special Hazards

May produce toxic hydrogen iodide and potassium oxide fumes.

Advice for Firefighters

Wear self-contained breathing apparatus, if possible.

Additional Information

Use of water is acceptable to cool unopened containers

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Use a non-combustible material such as sand or vermiculite to cover spill and soak up liquids. Sweep up and shovel dry material. Place spilled material in non-combustible and properly labeled container. Dispose of material according to local regulations (see section 13).

Reference to other sections

For disposal see section 13

7. Handling and Storage

Precautions for safe handling

Avoid contact with skin and eyes. Safety glasses/goggles and chemical resistant gloves must be worn. Wash hands thoroughly, immediately before and after use. Avoid the use waterless hand cleaners and sanitizers.

Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of heat and ignition

Conditions for safe storage

Store in cool, dry location. Protect from heat, light, and moisture.

8. Exposure Controls and Personal Protection

Respiratory protection

Where risk assessment shows respiratory protection is appropriate, use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with chemical resistant gloves based on nitrile, neoprene, or rubber construction. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good industrial hygiene practices. Wash and dry hands.

Eye protection

Safety glasses with side-shields conforming to ANSI Z87.1. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Specific engineering controls

Use adequate ventilation from mechanical source to control airborne dust exposure.

9. Physical and Chemical Properties

Appearance

Form: Solid/Crystal

Color: White to off-white

Safety data

pH:	6 - 9 at 166 g/l at 25 °C (77 °F)
Melting point/freezing point:	681 °C (1,258 °F)
Boiling point:	1,330 °C (2,426 °F)
Flash point:	Not Flammable
Ignition temperature:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Flammability:	No data available
Lower Explosion Limit(UEL):	N/A
Upper Explosion Limit(LEL):	N/A
Vapor pressure:	1 hPa (1 mmHg) at 745 °C (1,373 °F)
Density:	3.130 g/cm ³
Specific Gravity	No data available
Water solubility:	58.5% w/w
Partition coefficient n-octanol/water:	No data available

9. Physical and Chemical Properties(cont.)

Relative vapor density:	No data available
Odor:	Odorless
Odor Threshold:	No data available
Evaporation rate:	No data available
Viscosity:	No data available

10. Stability and Reactivity Data

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Violent reaction or ignition may occur on contact with diazonium salts

10. Stability and Reactivity Data (Continued)

Conditions to avoid

High heat

Materials to avoid

Oxidizing agents, Diazonium salts

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions - Hydrogen iodide, Potassium oxide

Hazardous Polymerizations

No known occurrences

11. Toxicology Information

Acute toxicity**Oral LD_{Lo}**

1,862mg/kg (oral-mouse)

Inhalation LC₅₀

No data available

Dermal LD_{Lo}

1,117mg/kg (ipr-mouse)

Other information on acute toxicity

No data available

Skin corrosion/irritation

May Cause Irritation

Serious eye damage/eye irritation

May Cause Irritation

Respiratory or skin sensitization

Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

Germ cell mutagenicity

No data available

Carcinogenicity

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.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

Reproductive toxicity

No data available

Teratogenicity

Human teratogenic effects by ingestion. There may be an increased risk of thyroid suppression of newborns exposed to excess amounts of potassium iodide in utero.

Specific target organ toxicity - single exposure (Globally Harmonized System)

No data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)

No data available

Aspiration hazard

No data available

Potential health effects

Inhalation: May be harmful if inhaled.
Ingestion: May be harmful if swallowed.
Skin: May cause skin irritation.
Eyes: May cause eye irritation.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Prolonged exposure to iodides may produce iodism in sensitive individuals. Symptoms of exposure include: skin rash, running nose, headache and irritation of the mucous membrane. For severe cases the skin may show pimples, boils, hives, blisters and black and blue spots. Iodides are readily diffused across the placenta. Neonatal deaths from respiratory distress secondary to goiter have been reported. Iodides have been known to cause drug-induced fevers, which are usually of short duration.

Synergistic effects No data available

12. Ecological Information

Toxicity

Not toxic to environment under U.S. EPA regulations. It is possible that large or frequent spills may be hazardous or damaging to the environment.

Persistence and degradability

Expected to completely degrade under typical circumstances under U.S. EPA standards.

Bioaccumulative potential

Does not accumulate under U.S. EPA standards

Mobility in soil

No data available

PBT and vPvB assessment

No data available

Other adverse effects

No data available

13. Disposal

Under applicable U.S. Environmental Protection Agency regulations this material is not considered to be environmentally hazardous in regards to waste disposal.

Follow all local, municipal, U.S. state, and U.S. federal regulations if in the United States of America.

For other countries consult your local, area, or country regulatory authority as applicable to a hazardous product.

14. Transportation and Shipping

DOT (US)

UN number: N/A Class: N/A Packing group: N/A
Proper shipping name: Not Classified
Reportable Quantity (RQ): N/A
Marine pollutant: No
Poison Inhalation Hazard: No

IMO

Follow current IMDG Code for proper transportation guidelines.

IATA

Follow current IATA Regulations for proper transportation guidelines.

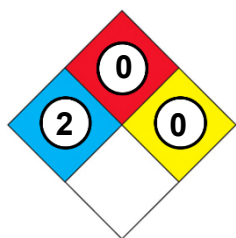
15. Regulatory Information

CERCLA Sec. 103 RQ#	NO	EHS 302 TPQ	NO
RCRA Sec. 261.33	NO	TSCA Listed?	YES
SARA Sec. 261.33 RQ#	NO	EPA Special Hazard	NO
SARA 312 Name List	NO	CA Prop 65	NO
SARA 313 Name List	NO	REACH Listed?	NO

16. Other Information

The information contained herein is believed to be accurate, but does not purport to be all inclusive and shall be used only as a guide. The information provide in this document is based on current available data and is applicable to the product with regard to appropriate safety precautions. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. Lab Alley LLC assumes no responsibility for injuries from the use of the product described above.

NFPA Rating



RESOURCES:

United States Environmental Protection Agency
United States Occupational Health and Safety Administration
United States Department of Transportation
United State Drug Enforcement Administration
United Nations "Transport of Dangerous Goods" 17th Edition, 2011
International Maritime "Dangerous Goods Code"
International Air Transportation Association "Dangerous Goods Regulation"

TERMINOLOGY:

ACGIH	American Conference of Governmental Industrial Hygienists	RCRA	Resource Conservation and Recovery Act
CA	State of California, U.S.A.	REACH	Registration, Evaluation, Authorization and Restriction of Chemicals
CAS	Chemical Abstract Services	SARA	Superfund And Reauthorization Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	TLV	Threshold Limit Value
EHS	Environmental Health and Safety	TPQ	Threshold Planning Quantity
HEPA	High Efficiency Particulate Air	TSCA	Toxic Substances Control Act
LEL	Lower Explosive Limit	UEL	Upper Explosive Limit
LD₅₀	Lethal dose for 50% of population	UN	United Nations
IMO	International Maritime Organization	IATA	International Air Transport Association
NIOSH	National Institute of Occupational Safety and Health	EPA	Environmental Protection Agency
OSHA	Occupational Safety and Health Administration	DoT	Department of Transportation
PEL	Permissible Exposure Limits	STEL	Short Term Exposure Limit
CEIL	Ceiling Value	TWA	Time-Weighted Average