Safety Data Sheet

1. Product and Company Identification

Product Name:	**Potassium Iodide Crystals**
Product Use(s):	Industrial manufacturing, Food Supplement
Manufacturer/Seller:	IodiTech® Inc.
Address:	951 N. Topping Ave. Kansas City, MO, 64120 USA
Emergency Telephone:	Chemtrec 800.424.9300
E-mail:	Info@ioditech.com

2. Hazards Identification

GHS Classification

Eye irritation (Category 2B)

GHS Label elements, including precautionary statements

Signal Word: Warning

Hazard statement(s)

H320	Causes eye irritation

Precautionary statement(s)

P264	Wash thoroughly after handling.
P280	Wear protective gloves/ eye protection/ face protection.
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 (CO_2)

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:	Non-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/cm3
Specific Gravity	No data available
Water solubility:	58.5% w/w
Partition coefficient n-octanol/water:	No data available
Relative vapor density:	No data available
Odor:	No data available
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 LC_{50}	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.

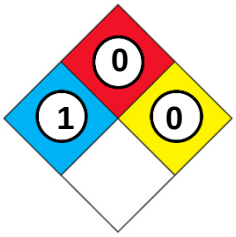
15. Regulatory Information

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. IodiTech® Inc. 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
LD_{50}	Lethal dose for 50% of population	**UN**	United Nations
IMO	International Maritime Organization	**IATA**	International Air Transport Association
NIOSHA	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