

Safety Data Sheet

1) Identification of Material and Manufacturer

Product Name	Calcium Iodate
Product Use(s)	Industrial Precursor
Manufacturer/Seller	IodiTech Inc.
Address	951 N. Topping Ave., Kansas City, MO, 64120 U.S.A.
Emergency Telephone	Chemtrec 800.424.9300
E-mail	info@ioditech.com

2) Hazards Identification

- *This product is hazardous.*
- *Avoid inhalation and contact with skin or eyes.*

Chemical Name	Calcium Iodate, $\text{Ca}(\text{IO}_3)_2$
Classification of Substance	Oxidizer, Corrosive
CAS	7789-80-2
OSHA PEL	Not Established
ACGIH TLV	Not Established



3) Composition Information

Ingredient	Concentration
Calcium Iodate, anhydrous or monohydrate	99% w/w

Calcium Iodate

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4) First Aid Measures

Inhalation	Move victim to fresh air. Seek medical attention if breathing is distressed.
Skin Contact	Wash exposed area thoroughly with soap and water. Seek medical attention if irritation persists.
Eye Contact	Immediately flush eyes with water, remove contacts if present, flush with water for another 10 minutes. Seek medical attention if irritation persists.
Ingestion	Promptly drink large quantities of water.

5) Firefighting Measures

Extinguishing Media	Water, carbon dioxide, or foam
Special Hazards	May produce toxic iodine fumes and calcium oxide. May make fire more intense.
Additional Information	Firefighter should wear self-contained breathing apparatus, if possible.

6) Accidental Release Measures

In case of spill, leak, or release	Sweep up and shovel into container. Use electric, self-contained vacuum to collect residual dust. Store properly until disposal.
Method of waste disposal	Follow all local, municipal, state, and federal guidelines, if in the United States of America. For all other countries, consult local, regional, or country regulations as applicable to a hazardous product.

- ***This material is hazardous.***
- ***Dry material may be placed in appropriate containers and disposed of in accordance with applicable governmental agencies for your location.***

7) Handling and Storage

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<ul style="list-style-type: none"> • Store in cool, dry location 	<ul style="list-style-type: none"> • Protect from heat, light, moisture 	<ul style="list-style-type: none"> • Must use with adequate ventilation
<ul style="list-style-type: none"> • Do NOT reuse containers 	<ul style="list-style-type: none"> • Safety glasses or goggles must be worn 	<ul style="list-style-type: none"> • Wash hands thoroughly, immediately before and after use
<ul style="list-style-type: none"> • Chemical resistant gloves must be worn 	<ul style="list-style-type: none"> • Do not use waterless hand cleaners 	<ul style="list-style-type: none"> • Use good personal hygiene

8) Exposure Controls and Personal Protection

Calcium Iodate	OSHA PEL	None Establish
	ACGIH TLV	None Establish

Engineering Controls	Use adequate ventilation from mechanical source to control airborne dust exposure.
Personal Protection	<ul style="list-style-type: none"> • Wear a NIOSH/MSHA-approved respirator with a HEPA cartridge or equivalent. • Wear chemical resistant gloves based on nitrile, neoprene, or rubber construction. • Wear safety glasses with side shields, or goggles. • Wear body protection to avoid skin contact.

9) Physical and Chemical Properties

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Appearance	Beige, powder	Flash Point	Non-Flammable
Odor	Odorless	Est. Explosive Range Limit	LEL - Not Available UEL - Not Available
Odor Threshold	Not Available	Flash Point Method Used	Not Applicable
pH	Not Available	Partition Coefficient	Not Available
Melting Point	Not Available	Decomposition Temperature	Not Available
Boiling Point	Not Available	Viscosity	Not Applicable
Vapor Pressure	Not Applicable	Explosive Properties	Not Explosive
Evaporation Rate	Not Applicable	Oxidizing Properties	Oxidizer
Solubility in Water	Soluble	Other Information	Contains Iodine

10) Stability and Reactivity Data

Reactivity	Stable
Chemical Stability	Stable, when stored properly
Conditions to Avoid	Alcohols, Reducing agents, Phosphorus, Sulphur compounds, Copper, Aluminum, high heat, and chlorinated compounds.
Incompatibility	Alcohols, Reducing agents, Phosphorus, Sulphur compounds, Copper, Aluminum, high heat, and chlorinated compounds.
Hazardous Polymerization	Will not occur.
Hazardous Decomposition	Hydrogen iodide, Calcium oxide may be released when exposed to high heat.

11) Toxicology Information

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Calcium iodate, anhydrous	LD ₅₀ (oral, mouse)	Not Available
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- **Not considered orally toxic except with extreme intake levels.**
- **After exposure skin may become irritated and demonstrate redness, pain, dryness and itching.**
- **May cause eye irritation as evidenced by pain, redness and tearing of eyes.**
- **May be irritating to respiratory tract under normal conditions.**
- **Avoid breathing dust.**
- **Increased nasal mucous membrane production and increased tears in eyes may occur upon breathing dust.**
- **Germ cell mutagenicity has not been conducted for this material.**
- **This product does not contain any known carcinogens.**
- **This product does not cause reproductive toxicity.**

12) Ecological Information

Toxicity	Not toxic to environment under U.S. EPA regulations.
Persistence/Degradation in Environment	Expected to completely degrade under typical circumstances under U.S. EPA standards.
Bioaccumulation	Does not accumulate under U.S. EPA standards.
Mobility in Soil	Not studied.

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

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Americas Region	Class 5.1; Packing group II
Proper Shipping Name	Oxidizing solid, n.o.s. (Calcium iodate)
U.N. Number	1479
International	Follow U.N. recommendations on The Transport of Dangerous Goods, 17th edition, revised
Ocean	Follow IMO International Maritime Dangerous Goods Code
Air	Follow IATA Dangerous Goods Regulation

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	YES
SARA 312 Name List	YES	CA Prop 65	NO
SARA 313 Name List	YES	REACH Listed?	NO

SARA Section 312 Hazardous Categories	
Immediate (acute) Health Hazard	YES
Delayed (chronic) Health Hazard	YES
Fire Hazard	NO
Reactivity Hazard	YES
Sudden Release of Pressure	NO

16) Other Information

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The information contained herein is based on the data available to us and is believed to be accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. We assume no responsibility for injuries from the use of the product described herein.

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
MSHA	Mine Safety Health Administration	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	IMO	International Maritime Organization