



<a href="#">Ytterbium(III) Iodide</a>		<a href="#">Pricing &gt;</a>
<b>Linear Formula</b>	YbI <sub>3</sub>	
<b>Pubchem CID</b>	83751	
<b>MDL Number</b>	N/A	
<b>EC No.</b>	237-474-5	
<b>IUPAC Name</b>	triiodoytterbium	
<b>Beilstein/Reaxys No.</b>	N/A	
<b>SMILES</b>	I[Yb](I)I	
<b>Inchl Identifier</b>	InChI=1/2HI.Yb/h2*1H;/q;;+2/p-2	
<b>Inchl Key</b>	LSSJSIMBIIVSTN-UHFFFAOYSA-K	
<b>Signal Word</b>	Danger	
<b>Hazard Statements</b>	H315-H319-H360	
<b>Hazard Codes</b>	Xi, Xn	
<b>Precautionary Statements</b>	P201-P202-P264-P280-P302+P352-P305+P351+P338-P308+P313-P321-P332+P313-P337+P313-P362-P405-P501	
<b>Risk Codes</b>	N/A	
<b>Safety Statements</b>	N/A	
<b>Transport Information</b>	NONH for all modes of transport	
<b>GHS Pictograms</b>	<a href="#">GHS07 Exclamation Point</a> 	
	<a href="#">GHS08 Health Hazard</a> 	

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## SAFETY DATA SHEET

Date Accessed: 05/19/2024

Date Revised: 01/15/2022

### SECTION 1. IDENTIFICATION

**Product Identifiers:** All applicable American Elements product codes for CAS #13813-44-0

**Relevant identified uses of the substance:**  
Scientific research and development

Supplier details:  
American Elements  
10884 Weyburn Ave.  
Los Angeles, CA 90024  
Tel: +1 310-208-0551  
Fax: +1 310-208-0351

Emergency telephone number:  
Domestic, North America +1 800-424-9300  
International +1 703-527-3887

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## SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture  
GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)  
Skin irritation (Category 2), H315  
Eye irritation (Category 2A), H319  
Reproductive toxicity (Category 1B), H360  
GHS Label elements, including precautionary statements  
Pictogram



Signal word: Danger  
Hazard statement(s)  
H315  
Causes skin irritation.  
H319  
Causes serious eye irritation.  
H360  
May damage fertility or the unborn child.  
Precautionary statement(s)  
P201  
Obtain special instructions before use.  
P202  
Do not handle until all safety precautions have been read and understood.  
P264  
Wash skin thoroughly after handling.  
P280  
Wear protective gloves/ eye protection/ face protection.  
P302 + P352  
IF ON SKIN: Wash with plenty of soap and water.  
P305 + P351 + P338  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P308 + P313  
IF exposed or concerned: Get medical advice/ attention.  
P321  
Specific treatment (see supplemental first aid instructions on this label).  
P332 + P313  
If skin irritation occurs: Get medical advice/ attention.  
P337 + P313

If eye irritation persists: Get medical advice/ attention.  
P362  
Take off contaminated clothing and wash before reuse.  
P405  
Store locked up.  
P501  
Dispose of contents/ container to an approved waste disposal plant.  
Hazards not otherwise classified (HNOC) or not covered by GHS - none

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### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substances  
Formula: YbI<sub>3</sub>  
Molecular weight: 426.85 g/mol  
CAS-No.: 13813-44-0

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### **SECTION 4. FIRST AID MEASURES**

Description of first aid measures  
General advice  
Consult a physician. Show this safety data sheet to the doctor in attendance.  
Move out of dangerous area.  
If inhaled  
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.  
In case of skin contact  
Wash off with soap and plenty of water. Consult a physician.  
In case of eye contact  
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.  
If swallowed  
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.  
Most important symptoms and effects, both acute and delayed  
The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11  
Indication of any immediate medical attention and special treatment needed  
No data available

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## **SECTION 5. FIREFIGHTING MEASURES**

Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture

No data available

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

No data available

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## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas.

Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust.

Sweep up and shovel. Keep in suitable, closed containers for disposal.

Reference to other sections

For disposal see section 13.

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## **SECTION 7. HANDLING AND STORAGE**

Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Handle and store under inert gas.

Specific end use(s)

Apart from the uses mentioned in section 1 no other specific uses are stipulated

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## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Exposure controls

Appropriate engineering controls

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

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. 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 laboratory practices. Wash and dry hands.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

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## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Information on basic physical and chemical properties

Appearance

Form: Solid in various forms

Odour

No data available  
Odour Threshold  
No data available  
pH  
No data available  
Melting point/freezing point  
No data available  
Initial boiling point and boiling range  
No data available  
Flash point  
Not applicable  
Evaporation rate  
No data available  
Flammability (solid, gas)  
No data available  
Upper/lower flammability or explosive limits  
No data available  
Vapour pressure  
No data available  
Vapour density  
No data available  
Relative density  
No data available  
Water solubility  
No data available  
Partition coefficient: n-octanol/water  
No data available  
Auto-ignition temperature  
No data available  
Decomposition temperature  
No data available  
Viscosity  
No data available  
Explosive properties  
No data available  
Oxidizing properties  
No data available  
Other safety information  
No data available

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## **SECTION 10. STABILITY AND REACTIVITY**

Reactivity  
No data available  
Chemical stability  
Stable under recommended storage conditions.  
Possibility of hazardous reactions  
No data available  
Conditions to avoid  
Tin/tin oxides  
Incompatible materials  
Strong reducing agents, Nickel, Strong acids, and its alloys, Steel (all types and surface treatments),

Aluminum, Alkali metals, Brass, Magnesium, Zinc,  
cadmium, Copper  
Hazardous decomposition products  
Hazardous decomposition products formed under fire  
conditions.-Hydrogen iodide, Europium/europium  
oxides  
Other decomposition products-No data available  
In the event of fire: see section 5

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## **SECTION 11. TOXICOLOGICAL INFORMATION**

Information on toxicological effects

Acute toxicity

No data available

Inhalation:

No data available

Dermal:

No data available

No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitisation

No data available

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.

NTP:

No component of this product present at levels  
greater than or equal to 0.1% is identified as a  
known or anticipated carcinogen by NTP.

OSHA:

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

Reproductive toxicity

Presumed human reproductive toxicant

No data available

Specific target organ toxicity -single exposure

No data available

Specific target organ toxicity -repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

RTECS: Not available

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., Rare earth compounds may cause delayed blood clotting leading to hemorrhages. Inhalation of rare earths may cause sensitivity to heat, itching, and increased awareness of odor and taste., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Stomach-Irregularities-Based on Human Evidence

Stomach-Irregularities-Based on Human Evidence

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## **SECTION 12. ECOLOGICAL INFORMATION**

Toxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects

No data available

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## **SECTION 13. DISPOSAL CONSIDERATIONS**

Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contact a licensed professional waste disposal service to dispose of this material.

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.



Contaminated packaging  
Dispose of as unused product.

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## **SECTION 14. TRANSPORT INFORMATION**

DOT (US)  
Not dangerous goods  
IMDG  
Not dangerous goods  
IATA  
Not dangerous goods

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## **SECTION 15. REGULATORY INFORMATION**

SARA 302  
Components  
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.  
SARA 313  
Components  
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.  
SARA 311/312  
Hazards  
Acute Health Hazard, Chronic Health Hazard  
Massachusetts Right To Know  
Components  
No components are subject to the Massachusetts Right to Know Act.  
Pennsylvania Right To Know  
Components  
CAS-No.  
Revision Date  
Europium(II) diiodide  
22015-35-6  
New Jersey Right To Know  
Components  
Europium(II) diiodide  
CAS-No. 22015-35-6  
Revision Date  
California Prop. 65  
Components  
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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## 16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.

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