Lead Iodide	Pricing >
Lead Iodide Solution	Pricing >
Ultra Dry Lead Iodide	Pricing >

Linear Formula	PbI_2
Pubchem CID	24931
MDL Number	MFCD00011163
EC No.	233-256-9
IUPAC Name	diiodolead
Beilstein/Reaxys No.	N/A
SMILES	I[Pb](I)(I)I
InchI Identifier	InChI=1S/4HI.Pb/h4*1H;/q;;;;+4/p-4
InchI Key	CDTCEQPLAWQMLB-UHFFFAOYSA-J
Signal Word	Danger
Hazard Statements	H302-H332-H360-H373-H410
Hazard Codes	T, N
Precautionary Statements	P201-P260-P280-P301+P312+P330-P308+P313
Risk Codes	61-20/22-33-50/53-62
Safety Statements	53-45-60-61
RTECS Number	N/A
Transport Information	UN 2291 6.1/PG III
WGK Germany	3
GHS Pictograms	**GHS07 Exclamation Point**  **GHS08 Health Hazard**  **GHS09 Environment** 

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SAFETY DATA SHEET

Date Accessed: 06/24/2022
Date Revised: 05/15/2015

SECTION 1. IDENTIFICATION

Product Identifiers: All applicable American Elements product codes for CAS #10101-63-0

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

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)
GHS08 Health hazard
Repr. 1A H360 May damage fertility or the unborn child.
STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.
GHS07
Acute Tox. 4 H302 Harmful if swallowed.
Acute Tox. 4 H332 Harmful if inhaled.
Hazards not otherwise classified No data available
GHS label elements, including precautionary statements

Hazard pictograms
GHS07 GHS08
Signal word Danger
Hazard statements
H302+H332 Harmful if swallowed or if inhaled.
H360 May damage fertility or the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.
Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P281 Use personal protective equipment as required.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
WHMIS classification
D1B - Toxic material causing immediate and serious toxic effects
D2A - Very toxic material causing other toxic effects
Classification system
HMIS ratings (scale 0-4)
(Hazardous Materials Identification System)
Health (acute effects) = 2
Flammability = 0
Physical Hazard = 1
Other hazards
Results of PBT and vPvB assessment
PBT: N/A
vPvB: N/A

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances
CAS No. / Substance Name:
10101-63-0 Lead(II) iodide
Identification number(s):
EC number: 233-256-9
Index number: 082-001-00-6

SECTION 4. FIRST AID MEASURES

Description of first aid measures
If inhaled:
Supply patient with fresh air. If not breathing, provide artificial respiration. Keep patient warm.
Seek immediate medical advice.
In case of skin contact:
Immediately wash with soap and water; rinse thoroughly.
Seek immediate medical advice.
In case of eye contact:
Rinse opened eye for several minutes under running water. Consult a physician.
If swallowed:
Seek medical treatment.

Information for doctor
Most important symptoms and effects, both acute and delayed:
No data available
Indication of any immediate medical attention and special treatment needed:
No data available

SECTION 5. FIREFIGHTING MEASURES

Extinguishing media
Suitable extinguishing agents Product is not flammable. Use fire-fighting measures that suit the surrounding fire.
Special hazards arising from the substance or mixture
If this product is involved in a fire, the following can be released:
Hydrogen iodide (HI)
Lead oxide fume
Advice for firefighters
Protective equipment:
Wear self-contained respirator.
Wear fully protective impervious suit.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Environmental precautions: Do not allow product to enter drains, sewage systems, or other water courses.
Methods and materials for containment and cleanup:
Dispose of contaminated material as waste according to section 13.
Ensure adequate ventilation.
Prevention of secondary hazards: No special measures required.
Reference to other sections
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7. HANDLING AND STORAGE

Handling
Precautions for safe handling

Keep container tightly sealed.
Store in cool, dry place in tightly closed containers.
Ensure good ventilation at the workplace.
Open and handle container with care.
Information about protection against explosions and fires: The product is not flammable
Conditions for safe storage, including any incompatibilities
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility:
Store in the dark.
Store away from oxidizing agents.
Further information about storage conditions:
Keep container tightly sealed.
Store in cool, dry conditions in well-sealed containers.
Protect from exposure to light.
Specific end use(s) No data available

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical systems:
Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.
Control parameters
Components with limit values that require monitoring at the workplace:
None.
Additional information: No data
Exposure controls
Personal protective equipment
Follow typical protective and hygienic practices for handling chemicals.
Keep away from foodstuffs, beverages and feed.
Remove all soiled and contaminated clothing immediately.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Maintain an ergonomically appropriate working environment.
Breathing equipment: Use suitable respirator when high concentrations are present.
Protection of hands:
Impervious gloves
Inspect gloves prior to use.
The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer.
Penetration time of glove material (in minutes) No

data available
Eye protection: Safety glasses
Body protection: Protective work clothing.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties
Appearance:
Form: Powder
Color: Yellow
Odor: Odorless
Odor threshold: No data available.
pH: N/A
Melting point/Melting range: 402 °C (756 °F)
Boiling point/Boiling range: 954 °C (1749 °F)
Sublimation temperature / start: No data available
Flammability (solid, gas) No data available.
Ignition temperature: No data available
Decomposition temperature: No data available
Autoignition: No data available.
Danger of explosion: No data available.
Explosion limits:
Lower: No data available
Upper: No data available
Vapor pressure: N/A

Density at 20 °C (68 °F): 6.16 g/cm^3 (51.405 lbs/gal)
Relative density No data available.
Vapor density N/A
Evaporation rate N/A
Solubility in / Miscibility with
Water at 20 °C (68 °F): 0.63 g/l
Partition coefficient (n-octanol/water): No data available.
Viscosity:
Dynamic: N/A
Kinematic: N/A
Other information No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity No data available
Chemical stability Stable under recommended storage conditions.
Thermal decomposition / conditions to be avoided:
Decomposition will not occur if used and stored according to specifications.
Possibility of hazardous reactions Reacts with strong oxidizing agents
Conditions to avoid No data available
Incompatible materials:

Oxidizing agents
Light
Hazardous decomposition products:
Hydrogen iodide (HI)
Lead oxide fume

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects
Acute toxicity:
Harmful if inhaled.
Harmful if swallowed.
LD/LC50 values that are relevant for classification: No data
Skin irritation or corrosion: May cause irritation
Eye irritation or corrosion: May cause irritation
Sensitization: No sensitizing effects known.
Germ cell mutagenicity: No effects known.
Carcinogenicity:
EPA-B2: Probable human carcinogen, sufficient evidence from animal studies; inadequate evidence or no data from epidemiologic studies.
NTP-R: Reasonably anticipated to be a carcinogen: limited evidence from studies in humans or sufficient evidence from studies in experimental animals.
ACGIH A3: Animal carcinogen: Agent is carcinogenic in experimental animals at a relatively high dose, by route(s) of administration, at site(s), of histologic type(s),
or by mechanism(s) not considered relevant to worker exposure. Available epidemologic studies do not confirm an increased risk of cancer in exposed humans.
Available evidence suggests that the agent is not likely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure.
IARC-2A: Probably carcinogenic to humans: limited human evidence; sufficient evidence in experimental animals
Reproductive toxicity: May damage fertility or the unborn child.
Specific target organ system toxicity - repeated exposure: May cause damage to organs through prolonged or repeated exposure.
Specific target organ system toxicity - single exposure: No effects known.
Aspiration hazard: No effects known.
Subacute to chronic toxicity: No effects known.
Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity
Aquatic toxicity: No data available
Persistence and degradability No data available
Bioaccumulative potential No data available
Mobility in soil No data available
Ecotoxical effects:
Remark: Very toxic for aquatic organisms
Additional ecological information:
Do not allow product to reach groundwater, water courses, or sewage systems, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
May cause long lasting harmful effects to aquatic life.
Avoid transfer into the environment.
Very toxic for aquatic organisms
Results of PBT and vPvB assessment
PBT: N/A
vPvB: N/A
Other adverse effects No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods
Recommendation Consult official regulations to ensure proper disposal.
Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.

SECTION 14. TRANSPORT INFORMATION

UN-Number
DOT, IMDG, IATA UN2291
UN proper shipping name
DOT RQ Lead compounds, soluble, n.o.s. (Lead(II) iodide)
IMDG, IATA LEAD COMPOUND, SOLUBLE, N.O.S. (Lead(II) iodide)
Transport hazard class(es)
DOT
Class 6.1 Toxic substances.
Label 6.1
Class 6.1 (T5) Toxic substances
Label 6.1
IMDG, IATA
Class 6.1 Toxic substances.

Label 6.1
Packing group
DOT, IMDG, IATA III
Environmental hazards: Environmentally hazardous substance, solid
Special precautions for user Warning: Toxic substances
EMS Number: F-A,S-A
Segregation groups Heavy metals and their salts (including their organometallic compounds), lead and its compounds
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code N/A
Transport/Additional information:
DOT
Hazardous substance: 10 lbs, 4.54 kg
Marine Pollutant (DOT): No
UN "Model Regulation": UN2291, Lead compounds, soluble, n.o.s. (Lead(II) iodide), 6.1, III

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture
GHS label elements, including precautionary statements
Hazard pictograms
GHS07 GHS08
Signal word Danger
Hazard statements
H302+H332 Harmful if swallowed or if inhaled.
H360 May damage fertility or the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.
Precautionary statements
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P281 Use personal protective equipment as required.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
National regulations
All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.
All components of this product are listed on the Canadian Non-Domestic Substances List (NDSL).

SARA Section 313 (specific toxic chemical listings)
10101-63-0 Lead(II) iodide
California Proposition 65
Prop 65 - Chemicals known to cause cancer
10101-63-0 Lead(II) iodide
Prop 65 - Developmental toxicity Substance is not listed.
Prop 65 - Developmental toxicity, female Substance is not listed.
Prop 65 - Developmental toxicity, male Substance is not listed.
Information about limitation of use: For use only by technically qualified individuals.
Other regulations, limitations and prohibitive regulations
Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006.
Substance is not listed.
The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed.
Substance is not listed.
Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed.
Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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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.
