

Ultra Dry Zinc Iodide		Pricing >
Zinc Iodide		Pricing >
Linear Formula	ZnI ₂	
Pubchem CID	66278	
MDL Number	MFCD00011299	
EC No.	233-396-0	
IUPAC Name	diiodozinc	
Beilstein/Reaxys No.	N/A	
SMILES	I[Zn]I	
Inchl Identifier	InChI=1S/2HI.Zn/h2*1H;/q;+2/p-2	
Inchl Key	UAYWVJHJZHQCIE-UHFFFAOYSA-L	
Signal Word	Danger	
Hazard Statements	H314	
Hazard Codes	C	
Risk Codes	34	
Safety Statements	26-36/37/39-45	
RTECS Number	N/A	
Transport Information	UN 3260 8/PG 3	
WGK Germany	3	

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SAFETY DATA SHEET

Date Accessed: 04/17/2024

Date Revised: 01/15/2022

SECTION 1. IDENTIFICATION

Product Identifiers: All applicable American Elements product codes for CAS #10139-47-6

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)

GHS05 Corrosion

Skin Corr. 1B H314 Causes severe skin burns and
eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

Hazards not otherwise classified No data available

GHS label elements, including precautionary
statements



Hazard pictograms

GHS05

Signal word Danger

Hazard statements

H314 Causes severe skin burns and eye damage.

Precautionary statements

P260 Do not breathe

dust/fume/gas/mist/vapors/spray.

P303+P361+P353 If on skin (or hair): Take off
immediately all contaminated clothing. Rinse skin with
water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with
water for several minutes. Remove contact lenses, if
present and easy to do. Continue rinsing.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do
NOT induce vomiting.

P405 Store locked up.

P501 Dispose of contents/container in accordance
with local/regional/national/international regulations.

WHMIS classification

D2B - Toxic material causing other toxic effects

E - Corrosive material

Classification system

HMIS ratings (scale 0-4)

(Hazardous Materials Identification System)

HEALTH

FIRE

REACTIVITY

3

0

1
Health (acute effects) = 3
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:
10139-47-6 Zinc iodide
Identification number(s):
EC number: 233-396-0

SECTION 4. FIRST AID MEASURES

Description of first aid measures
General information Immediately remove any clothing
soiled by the product.
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
Causes severe skin burns.
Causes serious eye damage.
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)

Iodine (I₂)

Metal 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 material to be released to the environment without official permits.

Methods and materials for containment and cleanup:

Use neutralizing agent.

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.

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 away from strong bases.
Store away from oxidizing agents.
Store in the dark.
Store away from water/moisture.
Further information about storage conditions:
This product is hygroscopic.
Store under dry inert gas.
Keep container tightly sealed.
Store in cool, dry conditions in well-sealed containers.
Protect from humidity and water.
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:
10139-47-6 Zinc iodide (100.0%)
TLV (USA) Long-term value: 0.01* ppm
*as inhalable fraction and vapor
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.
Avoid contact with the eyes and skin.
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.
Eye protection:
Tightly sealed goggles
Full face protection
Body protection: Protective work clothing.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance:

Form: Crystalline

Color: Off-white

Odor: Odorless

Odor threshold: No data available.

pH: N/A

Melting point/Melting range: 446 °C (835 °F)

Boiling point/Boiling range: 625 °C (1157 °F) (dec)

Sublimation temperature / start: No data available

Flash point: N/A

Flammability (solid, gas) No data available.

Ignition temperature: No data available

Decomposition temperature: No data available

Autoignition: No data available.

Danger of explosion: Product does not present an explosion hazard.

Explosion limits:

Lower: No data available

Upper: No data available

Vapor pressure: N/A

Density at 20 °C (68 °F): 4.74 g/cm³ (39.555 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): 4500 g/l

Soluble

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 No dangerous reactions known

Conditions to avoid No data available

Incompatible materials:

Alkali metals

Bases
Oxidizing agents
Water/moisture
Light
Hazardous decomposition products:
Hydrogen iodide (HI)
Metal oxide fume
Iodine (I₂)

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity: Swallowing will lead to a strong corrosive effect on mouth and throat and to the danger of perforation of esophagus and stomach.
LD/LC50 values that are relevant for classification: No data

Skin irritation or corrosion: Causes severe skin burns.

Eye irritation or corrosion: Causes serious eye damage.

Sensitization: No sensitizing effects known.

Germ cell mutagenicity: No effects known.

Carcinogenicity: No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

Reproductive toxicity: No effects known.

Specific target organ system toxicity - repeated exposure: No effects known.

Specific target organ system toxicity - single exposure: No effects known.

Aspiration hazard: No effects known.

Subacute to chronic toxicity:

Zinc containing fumes may cause metal fume fever.

Effects include dry throat, metallic taste, chest pain, dyspnea, rales and dry cough. Several hours later, chills

may occur with lassitude, malaise, fatigue, headache, back pain, muscle cramps, blurred vision, nausea, fever, perspiration, vomiting and leukocytosis.

Prolonged exposure to iodides may cause skin rash, running nose, headache and irritation of the mucous membranes. In severe cases the skin may show pimples,

boils, redness, black and blue spots, hives and blisters. Iodides are readily diffused across the placenta.

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.

Do not allow material to be released to the environment without official permits.

Danger to drinking water if even 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.

Recommended cleansing agent: Water, if necessary with cleansing agents.

SECTION 14. TRANSPORT INFORMATION

UN-Number

DOT, IMDG, IATA UN3260

UN proper shipping name

DOT Corrosive solid, acidic, inorganic, n.o.s. (Zinc iodide)

IMDG CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (Zinc iodide), MARINE

POLLUTANT

IATA CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (Zinc iodide)

Transport hazard class(es)

DOT
Class 8 Corrosive substances.
Label 8
Class 8 (C2) Corrosive substances
Label 8
IMDG
Class 8 Corrosive substances.
Label 8
IATA
Class 8 Corrosive substances.
Label 8
Packing group
DOT, IMDG, IATA II
Environmental hazards: Environmentally hazardous
substance, solid; Marine Pollutant
Marine pollutant (IMDG): Symbol (fish and tree)
Special precautions for user Warning: Corrosive
substances
Segregation groups Acids
Transport in bulk according to Annex II of
MARPOL73/78 and the IBC Code N/A
Transport/Additional information:
DOT
Marine Pollutant (DOT): No
Remarks: Special marking with the symbol (fish and
tree).
UN "Model Regulation": UN3260, Corrosive solid,
acidic, inorganic, n.o.s. (Zinc iodide), 8, II

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental
regulations/legislation specific for the substance or
mixture
GHS label elements, including precautionary
statements
Hazard pictograms
GHS05
Signal word Danger
Hazard statements
H314 Causes severe skin burns and eye damage.
Precautionary statements
P260 Do not breathe
dust/fume/gas/mist/vapors/spray.
P303+P361+P353 If on skin (or hair): Take off
immediately all contaminated clothing. Rinse skin with
water/shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with
water for several minutes. Remove contact lenses, if
present and easy to do. Continue rinsing.
P301+P330+P331 IF SWALLOWED: rinse mouth. Do
NOT induce vomiting.

P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
SARA Section 313 (specific toxic chemical listings)
10139-47-6 Zinc iodide
California Proposition 65
Prop 65 - Chemicals known to cause cancer
Substance is not listed.
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.
This product contains zinc and is subject to the reporting requirements of section 313 of the Emergency Planning and Community Right to Know Act of 1986 and 40CFR372.
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.
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).

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

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