

SAFETY DATA SHEET

Preparation Date: 10/8/2019

Revision date 10/9/2019

Revision Number: G1

1. IDENTIFICATION

Product identifier

Product code: Z1073
Product Name: ZINC IODIDE, PURIFIED

Other means of identification

Synonyms: Zinc Diiodide
CAS #: 10138-47-6
RTECS # Not available
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: No information available.
Uses advised against No information available

Supplier: Spectrum Chemical Mfg. Corp
 14422 South San Pedro St.
 Gardena, CA 90248
 (310) 516-8000

Order Online At: <https://www.spectrumchemical.com>
Emergency telephone number Chemtrec 1-800-424-9300
Contact Person: Tom Tyner (USA - West Coast)
Contact Person: Ibad Tirmiz (USA - East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

| | |
|-----------------------------------|---------------------------|
| Skin corrosion/irritation | Category 1 Sub-category B |
| Serious eye damage/eye irritation | Category 1 |

Label elements

Danger

Hazard statements

Causes severe skin burns and eye damage



Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Not available

Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Immediately call a POISON CENTER or physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water
Wash contaminated clothing before reuse
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician.
IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents and container to an approved waste disposal plant in accordance with local, regional, national and international regulations as applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component | CAS No | Weight-% |
|------------------|---------------|-----------------|
| Zinc Iodide | 10139-47-6 | 100 |

4. FIRST AID MEASURES

First aid measures

General Advice:

National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222. First aider needs to protect himself. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Skin Contact:

Wash off immediately with soap and plenty of water. Continue flushing with plenty of water for at least 15 minutes. Remove all contaminated clothes and shoes. Immediate medical attention is required. Call a physician or poison control center immediately.

Eye Contact:

Flush eyes with water for 15 minutes. Immediate medical attention is required. Call a physician immediately.

Inhalation:

Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. WARNING! It may be hazardous to the person providing aid to give

mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious or corrosive. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. If victim is conscious, give water or milk. Immediate medical attention is required.

Most important symptoms and effects, both acute and delayed

Symptoms Severe skin and eye irritation or burns
Causes eye damage
May cause abdominal pain, nausea, vomiting, diarrhea
Causes digestive (gastrointestinal) tract irritation
May cause gastrointestinal (digestive) tract burns
Can burn mouth, throat, and stomach
May cause perforation of the digestive tract

Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically.

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: The product is not flammable. If it is involved in a fire, extinguish the fire using an agent suitable for the type of surrounding fire.

Unsuitable Extinguishing Media: No information available.

Specific hazards arising from the chemical

Hazardous combustion products No information available.

Specific hazards No information available.

Special Protective Actions for Firefighters

Specific Methods: No information available

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Use personal protective equipment.

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

Methods for cleaning up Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Keep away from incompatible materials.

Safe Handling Advice:

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Do not ingest. Do not breathe dust. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Hygroscopic. Protect from moisture. Protect from light. Sensitive to light. Store in light-resistant containers.

Incompatible Materials:

Strong oxidizing agents
Strong bases
Peroxides
Metals

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

| Component | CAS No | OSHA | NIOSH | ACGIH | AIHA WEEL |
|-------------|------------|------|-------|---|-----------|
| Zinc Iodide | 10139-47-6 | None | None | 0.01 TWA (inhalable fraction and vapor) (for iodides) | None |

Canada

| Component | CAS No | Canada - Alberta | Canada - British | Canada - Ontario | Canada - Quebec |
|-----------|--------|------------------|------------------|------------------|-----------------|
|-----------|--------|------------------|------------------|------------------|-----------------|

| | | | | | |
|-------------|------------|------|-----------------|---|------|
| | | | Columbia | | |
| Zinc Iodide | 10139-47-6 | None | None | 0.01 TWA (inhalable fraction and vapor) (for iodides) | None |

Australia and Mexico

| Component | CAS No | Australia | Mexico |
|-------------|------------|-----------|--------|
| Zinc Iodide | 10139-47-6 | None | None |

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

- Eye protection:** Goggles or Face-shield.
- Skin and body protection:** Chemical resistant apron
Long sleeved clothing
Gloves
- Respiratory protection:** Effective dust mask. Wear respirator with dust filter. Use a dust respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentration of dust (dust clouds) , inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.
- Hygiene measures:** Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | | |
|--|--|--|
| Physical state: Solid | Appearance: Granular powder. | Color: White. Almost white. |
| Odor: No information available. | Taste No information available. | Formula ZI2 |
| Molecular/Formula weight (g/mole): 319.22 | Flammability (solid, gas) no data available | Flashpoint (°C/°F): No information available |
| Flash Point Tested according to: Not available | Autoignition Temperature (°C/°F): No information available | Lower Explosion Limit (%): No information available |
| Upper Explosion Limit (%): No information available | Melting point/range(°C/°F): 445-446 °C/833-835 °F | Decomposition temperature(°C/°F): No information available |
| Boiling point/range(°C/°F): No information available | Bulk density: No information available | Density (g/cm3): No information available |

Specific gravity:
4.740

pH
No information available

Vapor pressure @ 20°C (kPa):
No information available

Evaporation rate:
No information available

Vapor density:
No information available

VOC content (g/L):
No information available

Odor threshold (ppm):
No information available

**Partition coefficient
(n-octanol/water):**
No information available

Viscosity:
No information available

Miscibility:
No information available

Solubility:
No information available

10. STABILITY AND REACTIVITY

Reactivity
No information available

Chemical stability

Stability: Stable under recommended storage conditions. Sensitive to light. Hygroscopic.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Exposure to light. Exposure to moisture. Exposure to moist air. Incompatible materials.

Incompatible Materials: Strong oxidizing agents
Strong bases
Peroxides
Metals

Hazardous decomposition products: No information available.

Other Information

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:
Skin. Ingestion. Inhalation.

Acute Toxicity

Component Information

Zinc Iodide

CAS No | 10139-47-6

LD50/oral/rat = No information available

LD50/oral/mouse = No information available

LD50/dermal/rabbit = No information available

LD50/dermal/rat = No information available
 LC50/inhalation/rat = No information available
 LC50/inhalation/mouse = No information available
 Other LD50 or LC50 information = No information available

Product Information

LD50/oral/rat =
 Value - Acute Toxicity = No information available

LD50/oral/mouse =
 Value - Acute Tox = No information available

LD50/dermal/rabbit
 Value - Acute Toxicity = No information available

LD50/dermal/rat
 VALUE - Acute Tox = No information available

LC50/inhalation/rat
 VALUE-Vapor = No information available
 VALUE-Gas = No information available
 VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse
 VALUE-Vapor = No information available
 VALUE - Gas = No information available
 VALUE - Dust/Mist = No information available

Symptoms

Skin Contact: Causes severe irritation and burns.

Eye Contact: Causes severe eye irritation and possible burns. Possible eye damage.

Inhalation May cause irritation of respiratory tract.

Ingestion Causes digestive (gastrointestinal) tract irritation. May cause digestive (gastrointestinal) tract burns. Corrosive to the mouth, throat, and stomach. May cause perforation of the digestive tract. May cause abdominal pain, nausea, vomiting, diarrhea.

Aspiration hazard No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity No information available.

Sensitization: No information available.

Mutagenic Effects: No information available

Carcinogenic effects: Not considered carcinogenic.

| Component | CAS No | IARC | ACGIH - Carcinogens | NTP | OSHA HCS - Carcinogens | Australia - Notifiable | Australia - Prohibited |
|-----------|--------|------|---------------------|-----|------------------------|------------------------|------------------------|
|-----------|--------|------|---------------------|-----|------------------------|------------------------|------------------------|

| | | | | | | | |
|-------------|------------|------------|------------|------------|------------|--------------------------------|--------------------------------|
| | | | | | | Carcinogenic Substances | Carcinogenic Substances |
| Zinc Iodide | 10139-47-6 | Not listed | Not listed | Not listed | Not listed | Not listed | Not listed |

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity No data is available

Reproductive Effects: No information available
Developmental Effects: No information available
Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure No information available.
STOT - repeated exposure No information available.
Target Organs: No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: No data available.

Persistence and degradability: No information available

Bioaccumulative potential: No information available.

Mobility in soil No information available
Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:
Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:
Empty containers should be taken for local recycling, recovery or waste disposal

| Component | CAS No | RCRA - F Series Wastes | RCRA - K Series Wastes | RCRA - P Series Wastes | RCRA - U Series Wastes |
|-------------|------------|------------------------|------------------------|------------------------|------------------------|
| Zinc Iodide | 10139-47-6 | None | None | None | None |

14. TRANSPORT INFORMATION

DOT
UN-No: UN3260
Proper Shipping Name: Corrosive solid, acidic, inorganic, n.o.s.(Zinc Iodide)

Hazard Class 8
Subsidiary Class No information available
Packing group: III
Emergency Response Guide Number 154
Marine Pollutant No data available
DOT RQ (lbs): No information available
Special Provisions IB8, IP3, T1, TP33
Symbol(s): [DOT]: (G) - Identifies proper shipping names for which one or more technical names of the hazardous material must be entered in parentheses, in association with the basic description.

Description: UN3260, CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S., 8, III

TDG (Canada)

UN-No: UN3260
Proper Shipping Name: Corrosive solid, acidic, inorganic, n.o.s.(Zinc Iodide)
Hazard Class 8
Subsidiary Risk: No information available
Packing Group: III
Marine Pollutant No Information available
Description: UN3260, CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S., 8, III

ADR

UN Number UN3260
Proper Shipping Name: Corrosive solid, acidic, inorganic, n.o.s.(Zinc Iodide)
Transport hazard class(es) 8
Packing group III
Subsidiary Risk: No information available
Special Provisions 274
Description: UN3260, CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S., 8, III

IMDG

UN-No: UN3260
Proper Shipping Name: Corrosive solid, acidic, inorganic, n.o.s.(Zinc Iodide)
Hazard Class: 8
Subsidiary Risk: No information available
Packing Group: III
Marine Pollutant No information available
EMS: F-A
Special Provisions 223, 274
Description UN3260, CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (ZINC IODIDE), 8, III

RID

UN Number UN3260
Proper Shipping Name: Corrosive solid, acidic, inorganic, n.o.s.(Zinc Iodide)
Transport hazard class(es) 8
Subsidiary Risk: No information available
Packing group III
Special Provisions 274
Description: UN3260, CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S., 8, III

ICAO (air)

UN-No: UN3260
Proper Shipping Name: Corrosive solid, acidic, inorganic, n.o.s.(Zinc Iodide)
Hazard Class 8
Subsidiary Risk: No information available
Packing Group: III

Description: UN3260, CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S., 8, III
Special Provisions A3

IATA

UN Number UN3260
Proper Shipping Name: Corrosive solid, acidic, inorganic, n.o.s.(Zinc Iodide)
Transport hazard class(es) 8
Subsidiary Risk: No information available
Packing group III
Precautionary Statements - Response 8L
Special Provisions No information available
Description: UN3260, CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S., 8, III

15. REGULATORY INFORMATION

International Inventories

| Component | CAS No | U.S. TSCA | KOREA KECL | Philippines (PICCS) | Japan ENCS | China IECSC | Australia (AICS) | EINECS-No. |
|-------------|------------|----------------|------------------|---------------------|-----------------|-------------|------------------|-------------------|
| Zinc Iodide | 10139-47-6 | PresentACTIV E | Present KE-35557 | Not present | Present (1)-749 | Present | Present | Present 233-396-0 |

U.S. Regulations

Zinc Iodide

New Jersey RTK Hazardous Substance List: sn 3012
New Jersey (EHS) List: SN 3012 500 lb. TPQ
New Jersey - Discharge Prevention - List of Hazardous Substances: Present (zinc compouds)

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

| Component | CAS No | Carcinogen | Developmental Toxicity | Male Reproductive Toxicity | Female Reproductive Toxicity: |
|-------------|------------|------------|------------------------|----------------------------|-------------------------------|
| Zinc Iodide | 10139-47-6 | Not Listed | Not Listed | Not Listed | Not Listed |

CERCLA/SARA

| Component | CAS No | CERCLA - Hazardous Substances and their Reportable Quantities | Section 302 Extremely Hazardous Substances and TPQs | Section 302 Extremely Hazardous Substances and RQs | Section 313 - Chemical Category | Section 313 - Reporting de minimis |
|-------------|------------|---|---|--|---------------------------------|------------------------------------|
| Zinc Iodide | 10139-47-6 | None | None | None | None | None |

U.S. TSCA

| Component | CAS No | TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS) | TSCA 8(d) -Health and Safety Reporting |
|-------------|------------|---|--|
| Zinc Iodide | 10139-47-6 | Not Applicable | Not Applicable |

Canada

WHIMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

The WHMIS 2015 classification of this product has not been validated or reviewed yet.

Canada Hazardous Products Regulation This product has not been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

DSL/NDSL

| Component | CAS No | Canada (DSL) | Canada (NDSL) |
|-------------|------------|--------------|---------------|
| Zinc Iodide | 10139-47-6 | Not Listed | Present |

| Component | CAS No | CEPA Schedule I - Toxic Substances |
|-------------|------------|---|
| Zinc Iodide | 10139-47-6 | Not listed |
| Component | CAS No | CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting |
| Zinc Iodide | 10139-47-6 | Not listed |

EU Classification

EU GHS - SV - CLP 1272/2008

| Component | CAS No | EU GHS - SV - CLP (1272/2008) |
|-------------|------------|-------------------------------|
| Zinc Iodide | 10139-47-6 | |

EU - CLP (1272/2008)

R-phrase(s)

R34 - Causes burns

S -phrase(s)

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)

| Component | CAS No | Classification | Concentration Limits: | Safety Phrases |
|-------------|------------|----------------|-----------------------|----------------|
| Zinc Iodide | 10139-47-6 | | No information | |

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

C - Corrosive



16. OTHER INFORMATION

Preparation Date: 10/8/2019
Revision date: 10/9/2019

Product code: Z1073

Product name: ZINC IODIDE,
PURIFIED

Page 11 / 12

Prepared by:

Sonia Owen

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet