



SAFETY DATA SHEET

According to JIS Z 7253:2019 **Revision date** 28-Sep-2023 Revision Number 1.06

Section 1: PRODUCT AND COMPANY IDENTIFICATION

| Product Name | Lead(?) Iodide, 99.9% |
|---|--|
| Product Code | 124-06491,122-06492 |
| Supplier | FUJIFILM Wako Pure Chemical Corporation 1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan Phone: +81-6-6203-3741 |
| Emergency telephone number Recommended uses Restrictions on use | Fax: +81-6-6203-2029 +81-6-6203-3741 / +81-3-3270-8571 For research use only Seek expert judgment when using for purposes other than those recommended. |

Section 2: HAZARDS IDENTIFICATION

GHS classification <u>Classification of the substance or mixture</u> Carcinogenicity Reproductive Toxicity Specific target organ toxicity (single exposure) Category 1 blood system, kidneys, nervous system Specific target organ toxicity (repeated exposure) Category 1 blood system, kidneys, nervous system

Category 2 Category 1A Category 1

Category 1

Pictograms



Danger

Hazard statements

H351 - Suspected of causing cancer

H360 - May damage fertility or the unborn child

H370 - Causes damage to the following organs: blood system, kidneys, nervous system

H372 - Causes damage to the following organs through prolonged or repeated exposure: blood system, kidneys, nervous system

Precautionary statements-(Prevention)

Obtain special instructions before use

- · Do not handle until all safety precautions have been read and understood
- · Use personal protective equipment as required
- Do not breathe dust/fume/gas/mist/vapors/spray
- · Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- **Precautionary statements-(Response)**

IF exposed: Call a POISON CENTER or doctor/physician

Precautionary statements-(Storage)

Store locked up

Precautionary statements-(Disposal)

• Dispose of contents/container to an approved waste disposal plant

Others Other hazards

Not available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Single Substance or Mixture Substance

Formula

Pbl2

| Chemical Name | Weight-% | Molecular weight | ENCS | ISHL No. | CAS RN |
|---|----------|------------------|----------|----------|------------|
| Lead(II) iodide | =<100 | 461.01 | (1)-1139 | * | 10101-63-0 |
| Note on ISHL No.: * in the table means announced chemical substances. | | | | | |

Impurities and/or Additives: Not applicable

Section 4: FIRST AID MEASURES

Inhalation

Remove to fresh air. If symptoms persist, call a physician.

Skin contact

Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.

Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate medical attention is required.

Ingestion

Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

Protection of first-aiders

Use personal protective equipment as required.

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing media

Water spray (fog), Carbon dioxide (CO2), Foam, Extinguishing powder, Sand

Unsuitable extinguishing media

No information available

Specific hazards arising from the chemical product

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Special extinguishing method

No information available Special protective actions for

Special protective actions in

fire-fighters

Use personal protective equipment as required. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope. While working, wear appropriate protective equipments to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind.

Environmental precautions

To be careful not discharged to the environment without being properly handled waste water contaminated.

Methods and materials for contaminent and methods and materials for cleaning up

Sweep up and gather scattered particles, and collect it in an empty airtight container.

Recoverly, neutralization No information available

Secondary disaster prevention measures

Clean contaminated objects and areas thoroughly observing environmental regulations.

Section 7: HANDLING AND STORAGE

Handling

Technical measures

Avoid contact with strong oxidizing agents. Use with local exhaust ventilation.

Precautions

Do not rough handling containers, such as upsetting, falling, giving a shock, and dragging. Prevent leakage, overflow, and scattering. Not to generate steam and dust in vain. Seal the container after use. After handling, wash hands and face, and then gargle. In places other than those specified, should not be smoking or eating and drinking. Should not be brought contaminated protective equipment and gloves to rest stops. Deny unnecessary entry of non-emergency personnel to the handling area.

Safety handling precautions

Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Storage

Sa Incom

Safe storage conditions

| Keep container protect from light, store |
|--|
| in well-ventilated place at room temperature (preferably cool). Keep container tightly |
| closed. Packed with an inert gas. Store locked up. |
| Glass |
| Strong oxidizing agents |
| |

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls

In case of indoor workplace, seal the source or use a local exhaust system. Provide the safety shower facility, and handand eye-wash facility. And display their position clearly.

Exposure limits

| Chemical Name | JSOH (Japan) | ISHL (Japan) | ACGIH |
|-------------------------------|---|----------------------------------|---|
| Lead(II) iodide 10101-63-0 | TWA: 0.03 mg/m ³ OEL ISHL/ACL: 0.05 mg/m ³ | ISHL/ACL: 0.05 mg/m ³ | TWA: 0.05 mg/m ³ Pb TWA: 0.01 ppm inhalable fraction and vapor |

Personal protective equipment

Respiratory protection Hand protection Eye protection Skin and body protection General hygiene considerations Dust mask (JIS T 8151) chemical protective gloves (JIS T 8116) protective eyeglasses or chemical safety goggles Long-sleeved work clothes

Handle in accordance with good industrial hygiene and safety practice.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Form Color Appearance Odor Melting point/freezing point Boiling point, initial boiling point and boiling range Flammability Evaporation rate: Flammability (solid, gas): Upper/lower flammability or

slightly yellow - yellow crystalline powder - powder no data available 402 °C no data available no data available no data available no data available explosive limits Upper: Lower: Flash point Auto-ignition temperature: Decomposition temperature: pH Viscosity (coefficient of viscosity) Dynamic viscosity Solubilities

n-Octanol/water partition coefficient:(log Pow) Vapour pressure Specific Gravity / Relative density Vapour density Particle characteristics no data available potassium iodide soln. : soluble . water : slightly soluble . Ethanol : practically insoluble,or insoluble . no data available no data available

Section 10: STABILITY AND REACTIVITY

Stability

Reactivityno data availableChemical stabilityMay be altered by light.Hazardous reactionsMay be altered by light.None under normal processingConditions to avoidConditions to avoidExtremes of temperature and direct sunlightIncompatible materialsStrong oxidizing agentsHazardous decomposition productsHalides, Metal oxides

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity

| Chemical Name | Acute toxicity -oral- source information | Acute toxicity -dermal- source information | Acute toxicity -inhalation gas- source information |
|-----------------|---|--|--|
| Lead(II) iodide | Based on the NITE GHS | Based on the NITE GHS | Based on the NITE GHS |
| ζ, | classification results. | classification results. | classification results. |
| | | | |
| | | | |
| Chemical Name | Acute toxicity -inhalation vapor- source information | Acute toxicity -inhalation dust- source information | Acute toxicity -inhalation mist- source information |
| Chemical Name | | source information | |

Skin irritation/corrosion

| Chemical Name | Skin corrosion/irritation source information |
|-----------------------------------|--|
| Lead(II) iodide | Based on the NITE GHS classification results. |
| Serious eye damage/ irritation | |
| Chemical Name | Serious eye damage/irritation source information |
| Lead(II) iodide | Based on the NITE GHS classification results. |
| Respiratory or skin sensitization | |
| Chemical Name | Respiratory or Skin sensitization source information |
| Lead(II) iodide | Based on the NITE GHS classification results. |
| Reproductive cell mutagenicity | |
| Chemical Name | germ cell mutagencity source information |
| Lead(II) iodide | Based on the NITE GHS classification results. |
| Carcinogenicity | |
| Chemical Name | Carcinogenicity source information |

| Lead(II) iodide | | Based on the NITE GHS classification results. | | |
|---------------------------|-------------|---|-------|--------------|
| | | | | |
| Chemical Name | NTP | IARC | ACGIH | JSOH (Japan) |
| Lead(II) iodide Reasonabl | | Group 2A | A3 | Group 2B |
| 10101-63-0 | Anticipated | | | |
| Reproductive toxicity | | · · · | | |
| Chemical Name | | Reproductive toxicity source information | | |
| Lead(II) iodide | | Based on the NITE GHS classification results. | | |
| STOT-single exposure | | | | |
| Chemical Name | | STOT -single exposure- source information | | |
| Lead(II) iodide | | Based on the NITE GHS classification results. | | |
| STOT-repeated exposure | | | | |
| Chemical Name | | STOT -repeated exposure- source information | | |
| Lead(II) iodide | | Based on the NITE GHS classification results. | | |
| Aspiration hazard | | | | |
| Chemical Name | | Aspiration Hazard source information | | nformation |
| Lead(II) iodide | | Based on the NITE GHS classification results. | | |

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

No information available

Other data

| Chemical Name | Short-term (acute) hazardous to the aquatic environment source information | Long-term (chronic) hazardous to the aquatic environment source information |
|-----------------|--|---|
| Lead(II) iodide | | Based on the NITE GHS classification results. |

| Persistence and degradability | No information available |
|-------------------------------|--------------------------|
| Bioaccumulative potential | No information available |
| Mobility in soil | No information available |
| Hazard to the ozone layer | No information available |

Section 13: DISPOSAL CONSIDERATIONS

Waste from residues

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated container and contaminated packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Section 14: TRANSPORT INFORMATION

| ADR/RID UN number Proper shipping name: UN classfication Subsidiary hazard class Packing group | Not regulated - |
|--|--------------------------------------|
| Marine pollutant | Not applicable |
| IMDG UN number Proper shipping name: UN classfication Subsidiary hazard class Packing group Marine pollutant (Sea) | Not regulated - Not applicable |

| Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | No information available |
|--|--|
| IATA | Not regulated |
| UN number | - |
| Proper shipping name: | |
| UN classfication | |
| Subsidiary hazard class | |
| Packing group Environmentally Hazardous | Not applicable |
| Substance | Not applicable |
| Cusotanoo | |
| | |
| Se | ction 15: REGULATORY INFORMATION |
| | |
| Japanese regulations | |
| Fire Service Act | Not applicable |
| Poisonous and Deleterious | Deleterious Substances 3rd. Grade |
| Substances Control Law | |
| industrial Safety and Health Ac | tNotifiable Substances (Law Art.57-2, Enforcement Oder |

| Industrial Safety and Health Ac | tNotifiable Substances (Law Art.57-2, Enforcement Oder Art.18-2 Attached Table |
|---------------------------------|--|
| | No.9)No.411,606 |
| | Working Environment Evaluation Standards, Administrative Control Levels (Law Art.65-2, Para.1) |
| | Harmful Substances Whose Names Are to be Indicated on the Label (Law Art.57, Para.1, Enforcement Order Art.18) |
| Regulations for the carriage | Not applicable |
| and storage of dangerous | |
| goods in ship | |
| 0 | |
| Civil Aeronautics Law | Not applicable |
| Pollutant Release and Transfer | Specified Class 1 No. |
| Register Law | |
| (2023.4.1-) | |
| Specified Class 1-No. | 697 |
| Water Pollution Control Act | Harmful Substances (Law Art.2, Enforcement Order Art.2, Ordinace Designating Wastewater Standards Art.1) |
| Export Trade Control Order | Not applicable |
| Soil Contamination Control | Designated Hazardous Substances |
| Law | |

| Chemical Name | Poisonous and Deleterious Substances Control Law | Industrial Safety and Health Act Substances (Law Art.57-2) | Pollutant Release and Transfer Register Law (2023.4.1-) |
|--------------------------------------|---|--|---|
| Lead(II) iodide 10101-63-0(=<100) | Applicable | Applicable | Applicable |

Section 16: OTHER INFORMATION

 Key literature references and sources for data etc.
 NITE: National Institute of Technology and Evaluation (JAPAN) http://www.safe.nite.go.jp/japan/db.html IATA dangerous Goods Regulations RTECS:Registry of Toxic Effects of Chemical Substances Japan Industrial Safety and Health Association GHS Model SDS Dictionary of Synthetic Oraganic Chemistry , SSOCJ, Koudansha Scientific Co.Ltd. Chemical Dictionary, Kyouritsu Publishing Co., Ltd. etc

Disclaimer

This SDS is according to JIS Z 7253: 2019. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

GHS Classification is according to JIS Z 7252:2019. *JIS: Japanese Industrial Standards

End of Safety Data Sheet