



SAFETY DATA SHEET

According to JIS Z 7253:2019 **Revision date** 26-Feb-2024 Revision Number 2.05

Section 1: PRODUCT AND COMPANY IDENTIFICATION

| Product Name | Oxadiargyl Standard |
|-----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Code | 155-02661 |
| Supplier | FUJIFILM Wako Pure Chemical Corporation 1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan Phone: +81-6-6203-3741 Fax: +81-6-6203-2029 |
| Emergency telephone number Recommended uses Restrictions on use | +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> Skin sensitization Carcinogenicity Reproductive Toxicity Specific target organ toxicity (repeated exposure) Category 1 liver Acute aquatic toxicity Chronic aquatic toxicity

Category 1 Category 2 Category 2 Category 1

Category 1 Category 1

Pictograms



Hazard statements

- H351 Suspected of causing cancer
- H361 Suspected of damaging fertility or the unborn child
- H317 May cause an allergic skin reaction
- H410 Very toxic to aquatic life with long lasting effects
- H400 Very toxic to aquatic life

H372 - Causes damage to the following organs through prolonged or repeated exposure: liver

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
- · Contaminated work clothing should not be allowed out of the workplace
- Wear protective gloves
- 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

Avoid release to the environment

Precautionary statements-(Response)

• IF exposed or concerned: Get medical advice/attention

- · IF ON SKIN: Wash with plenty of soap and water
- If skin irritation or rash occurs: Get medical advice/attention
- Wash contaminated clothing before reuse
- Collect spillage

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

C15H14Cl2N2O3

| Chemical Name | Weight-% | Molecular weight | ENCS | ISHL No. | CAS RN |
|-------------------|----------|--------------------|---------------------|------------|------------|
| Oxadiargyl | 98.0 | 341.19 | N/A | 8-(7)-1487 | 39807-15-3 |
| Note on ISHL No.: | * in the | table means announ | ced chemical substa | ances. | |

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 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

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

Storage Safe storage conditions Storage conditions Keep container protect from light tightly closed. Store in a cool (2-10 °C) place. Safe packaging material Glass Incompatible substances Strong oxidizing agents

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls

Eye protection

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

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Personal protective equipment Respiratory protection Hand protection

Dust mask (JIS T 8151) chemical protective gloves (JIS T 8116) protective eyeglasses or chemical safety goggles (JIS T 8147) Long-sleeved work clothes

Skin and body protection General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

If this product is classified as "Chemical Substances Hazardous to Skin, etc.", use appropriate protective equipment to them.

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 explosive limits Upper: Lower: Flash point Auto-ignition temperature: Decomposition temperature: pH Viscosity (coefficient of viscosity) Dynamic viscosity | white crystalline powder - powder no data available no data available |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | |
| Solubilities | acetone : soluble . water , Ethanol : practically insoluble,or insoluble . |
| n-Octanol/water partition coefficient:(log Pow) Vapour pressure Specific Gravity / Relative density Vapour density Particle characteristics | no data available no data available no data available no data available no data available |

Section 10: STABILITY AND REACTIVITY

Stability

Reactivity no data available Chemical stability May be altered by light. Hazardous reactions None under normal processing Conditions to avoid Extremes of temperature and direct sunlight Incompatible materials Strong oxidizing agents Hazardous decomposition products Carbon monooxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx), Halides

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---------------|------------------------------|---------------------------------|----------------------------------|
| Oxadiargyl | > 5000 mg/kg(Rat) | > 2000 mg/kg(Rat) | > 5.16 mg/L(Rat)4 h |
| | | | |
| Chemical Name | Acute toxicity -oral- source | | Acute toxicity -inhalation gas- |
| | information | information | source information |
| Oxadiargyl | Based on the NITE GHS | Based on the NITE GHS | Based on the NITE GHS |
| | classification results. | classification results. | classification results. |
| | | | |
| Chemical Name | Acute toxicity -inhalation | Acute toxicity -inhalation dust | Acute toxicity -inhalation mist- |
| | vapor- source information | source information | source information |
| Oxadiargyl | Based on the NITE GHS | Based on the NITE GHS | Based on the NITE GHS |
| | classification results. | classification results. | classification results. |

Skin irritation/corrosion

| Chemical Name | Skin corrosion/irritation source information |
|---------------|-----------------------------------------------|
| Oxadiargyl | Based on the NITE GHS classification results. |

Serious eye damage/ irritation

| Sonous eye damage, innation | |
|-----------------------------------|------------------------------------------------------|
| Chemical Name | Serious eye damage/irritation source information |
| Oxadiargyl | Based on the NITE GHS classification results. |
| Respiratory or skin sensitization | |
| Chemical Name | Respiratory or Skin sensitization source information |
| Oxadiargyl | Based on the NITE GHS classification results. |
| Reproductive cell mutagenicity | |
| Chemical Name | germ cell mutagencity source information |
| Oxadiargyl | Based on the NITE GHS classification results. |
| Carcinogenicity | |
| Chemical Name | Carcinogenicity source information |
| Oxadiargyl | Based on the NITE GHS classification results. |

Reproductive toxicity

| Chemical Name | Reproductive toxicity source information |
|------------------------|-----------------------------------------------|
| Oxadiargyl | Based on the NITE GHS classification results. |
| STOT-single exposure | |
| Chemical Name | STOT -single exposure- source information |
| Oxadiargyl | Based on the NITE GHS classification results. |
| STOT-repeated exposure | |
| Chemical Name | STOT -repeated exposure- source information |
| Oxadiargyl | Based on the NITE GHS classification results. |
| Aspiration hazard | |
| Chemical Name | Aspiration Hazard source information |
| Oxadiargyl | Based on the NITE GHS classification results. |
| | |

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

| Chemical Name | Algae/aquatic plants | Fish | Crustacea |
|---------------|----------------------------------------------------------------|--------------------------------------------|-------------------------------------------|
| Oxadiargyl | ErC50 : Pseudokirchneriella subcapitata 0.0073 mg/L 72 h | LC50 : Cyprinus carpio > 0.89 mg/L 96 h | EC50 : Daphnia magna > 0.351 mg/L 48 h |

Other data

| Chemical Name | Short-term (acute) hazardous to the | Long-term (chronic) hazardous to the |
|---------------|----------------------------------------|----------------------------------------|
| | aquatic environment source information | aquatic environment source information |
| Oxadiargyl | Based on the NITE GHS classification | Based on the NITE GHS classification |
| | results. | 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 | UN3077 Environmentally hazardous substance, solid, n.o.s. (Oxadiargyl) 9 |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| Packing group Marine pollutant | III Yes |
| IMDG | |
| UN number | UN3077 |
| Proper shipping name: | Environmentally hazardous substance, solid, n.o.s. (Oxadiargyl) |
| UN classfication | 9 |
| Subsidiary hazard class | |
| Packing group | |
| Marine pollutant (Sea) | Yes |
| Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | No information available |
| ΙΑΤΑ | |
| UN number | UN3077 |
| Proper shipping name: | Environmentally hazardous substance, solid, n.o.s. (Oxadiargyl) |
| UN classfication | 9 |
| Subsidiary hazard class | |
| Packing group | |
| Environmentally Hazardous Substance | Yes |

Section 15: REGULATORY INFORMATION

| Japanese regulations | |
|------------------------------------|------------------------------------------------------------------------------------------------|
| Fire Service Act | Not applicable |
| Poisonous and Deleterious | Not applicable |
| Substances Control Law | |
| Industrial Safety and Health Act | t Not applicable |
| Industrial Safety and Health Act (| [2024.4.1~] Chemical Substances Hazardous to Skin, etc.(Regulations Article 594-2 Paragraph 1) |
| <u>2024~)</u> | |
| Regulations for the carriage | Noxious Substances (Ordinance Art.3, Ministry of Transportation Ordinance Regarding |
| and storage of dangerous | Transport by Ship and Storage, Attached Table 1) |
| goods in ship | |
| Civil Aeronautics Law | Misellaneous Dangerous Substances and Articles (Ordinance Art.194, MITL Nortification |
| | for Air Transportation of Explosives etc., Attached Table 1) |
| Pollutant Release and Transfer | Class 2 |
| Register Law | |
| (2023.4.1-) | |
| Class 2 - No. | 805 |
| Export Trade Control Order | Not applicable |
| | |

| 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-) |
|--------------------------------|-----------------------------------------------------|------------------------------------------------------------------|---------------------------------------------------------------|
| Oxadiargyl 39807-15-3(98.0) | - | - | Applicable |

Section 16: OTHER INFORMATION

| Key literature references and | NITE: National Institute of Technology and Evaluation (JAPAN) |
|-------------------------------|---------------------------------------------------------------|
| sources for data etc. | 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

Record of SDS revisions Disclaimer

The following contents were revised. Regulatory information.

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