## Safety Data Sheet

# Silver Acetate

1st Version : Feb. 01. 2011 Revised : Feb. 28. 2024

| Product Name :                      | Silver Acetate   |
|-------------------------------------|--|
| Company Name :                      | Toyo Chemical Industrial Co., Ltd.   |
| Address :                           | 2-26-13 Naka-Izumi, Komae-City, Tokyo  |
| Tel :                               | +81-3-3489-5152  |
| Fax :                               | +81-3-3488-1706  |
| Emergency Contact :                 | As above   |
| Recommended use of the product      | Antibacterial, catalyst, and synthetic organic intermediate                    |
| and restrictions on use :           |  |
| azard identification                |  |
| GHS classification of the substance | All items are "Outside scope of classification" or "Cannot classify".          |
| GHS Label elements                  |  |
| Pictograms :                        | None   |
| Signal word :                       | None   |
| Hazard statements :                 | None   |
| Precautionary statement             |  |
| Safety measures :                   | Do not breathe dust.   |
|                                     | Wash thoroughly after handling.  |
|                                     | Do not eat, drink or smoke when using this product.                            |
|                                     | Avoid release to the environment.  |
|                                     | Wear protective gloves/protective clothing/eye protection/face protection.     |
| Emergency measures :                | If swallowed : Call a doctor if you feel unwell.                               |
|                                     | If on skin : Wash with plenty of water or soap.                                |
|                                     | If skin irritation occurs : Get medical advice/attention.                      |
|                                     | If inhaled : Remove person to fresh air and keep comfortable for breathing.    |
|                                     | If in eyes: Rinse cautiously with water for several minutes.                   |
|                                     | Remove contact lenses if present and easy to do - continue rinsing.            |
|                                     | If eye irritation persists : Get medical advice/attention.                     |
|                                     | Collect spillage.  |
| Storage :                           | Store locked up.   |
| Disposal :                          | Dispose of contents/container entrust to a specialized waste disposal company. |

### 3. Composition/information on ingredients

| Substance or Mixt  | ure :                                   | Substance |  |  |                                      |
|--------------------|---|-----------|--|--|--------------------------------------|
| Chemical name      | Molecular formula<br>(molecular weight) | CAS No.   | Reference numbers in<br>gazetted list in Japan<br>(CSCL) | Reference numbers in<br>gazetted list in Japan<br>(ISHL) | Concentration or concentration range |
| Silver (I) Acetate | CH <sub>3</sub> COOAg<br>(166.91)       | 563-63-3  | 2-693 (Acetate)  |  | 100%                                 |

#### 4. First-aid measures

If inhalation :

Skin contact :

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

Wash with plenty of water/soap.

Immediately call a doctor.

| Rinse cautiously with water for several minutes.                                   |
|--|
| Remove contact lenses if present and easy to do - continue rinsing.                |
| If eye irritation persists : Get medical advice/attention.                         |
| Rinse mouth.   |
| Get medical advice/attention if you feel unwell.                                   |
| Rescuers should wear suitable protective equipment according to the circumstances. |
| (See section 8. Exposure controls / personal protection)                           |
|  |

# 5. Fire-fighting measures

| <u> </u>                                   |   |
|--|---|
| Suitable extinguishing media :             | Water, carbondioxide, gas, foam, powder   |
| Do not use extinguishing media :           | No information  |
| Specific hazards :                         | This substance can generate irritating or harmful gases (or fumes) in the event of a fire,    |
|  | so wear protective equipment when extinguishing fires.  |
| Specific fire extinguishing method :       | Move the container from the region on fire to a danger free location.                         |
|  | Continue to thoroughly cool the containers using copious amounts of water even after          |
|  | the fire has been extinguished.   |
|  | If it cannot be moved, cool it by sprinkling water around the container and its surroundings. |
| Special protective actions fire-fighters : | Wear suitable air respirators and protective clothing (heat resistant).                       |
|  | (See section 8. Exposure controls / personal protection)                                      |
|  |   |

| 6. Accidental release measures    |   |
|-----------------------------------|---|
| Personal precautions,             | Workers must wear appropriate protective equipment (see section 8. Exposure controls /    |
| protective equipment and          | personal protection) and avoid contact with eyes and skin and inhalation.                 |
| emergency procedures :            | Do not touch the leakage and do not walk on it.   |
|                                   | Prohibit the entrance except the person concerned.  |
| Environmental precautions :       | Avoid discharging into the environment.   |
| Methods and materials for         | No information  |
| containment and cleaning up :     |   |
| Preventing secondary accidents :  | No information  |
| 7. Handling and storage           |   |
| Handling                          |   |
| Technical measures :              | Take the equipment measures described in "8. Exposure controls/personal protection"       |
|                                   | and wear protective equipment.  |
|                                   | Described in "8. Exposure controls/personal protection" perform local exhaust and general |
|                                   | ventilation.  |
| Precautions for safe handling :   | Do not eat, drink or smoke when using this product.                                       |
|                                   | Wash hands thoroughly after handling.   |
|                                   | Wear protective gloves/protective clothing/protective glasses/protective surfaces.        |
|                                   | Avoid swallowing.   |
|                                   | Avoid contact with the skin.  |
|                                   | Do not get it in your eyes.   |
|                                   | Avoid discharging into the environment.   |
| Contact evasion:                  | See "10. Stability and reactivity" section.   |
| Storage                           |   |
| Safe storage conditions :         | Store locked up.  |
|                                   | Store in a closed container, dry and cool place.  |
|                                   | Store in a cool, dark place away from direct sunlight.                                    |
| Container and packing materials : | Airtight containers (glass, polyethylene, polypropylene, stainless steel, etc.)           |
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# 8. Exposure controls/personal protection

| Control concentration :               | Not set                      |
|---------------------------------------|------------------------------|
| Tolerable concentration:              |                              |
| Japan Society for Occupational Health | $0.01 \text{mg/m}^3$ (as Ag) |
| (2021)                                |                              |
|                                       | Ver GHS-11                   |

| ACGIH (2014)<br>Equipment measures : | TLV-TWA (0.01 mg/m <sup>3</sup> ) as Ag Soluble compounds<br>Workplaces storing or handling this material should be equipped with an eyewash facilities<br>and safety shower.<br>Enclose the equipment or install a local exhaust ventilation to prevent exposure. |
|--------------------------------------|--|
| Protective equipment                 |  |
| Respiratory protection :             | Wear suitable respiratory protection (gas mask (in case of fire: air respirator), dust mask).  |
|                                      | (Refer to JIS T8151 Particulate respirators, JIS T8152 Gas respirators,  |
|                                      | JIS T8155 Compressed air open-circuit self-contained breathing apparatus)  |
| Hand protection :                    | Wear suitable protective gloves. (rubber gloves, etc.)   |
|                                      | (Refer to JIS T8116 Chemical protective gloves)  |
| Eye protection :                     | Wear appropriate eye protection (regular glasses, plain glasses with side plates, goggles).  |
|                                      | (Refer to JIS T8147 Protective Glasses)  |
| Skin and body protection :           | Wear protective clothing, and protective shoes, etc.   |
|                                      | (Refer to JIS T8115 Chemical Protective Clothing, JIS T8117 Chemical Protective Boots)   |

| Needle-like or plate-like crystalline powder      |
|---|
| White   |
| Slight acetic acid odor                           |
| No information                                    |
| No information                                    |
|   |
| No information                                    |
| Solids are not applicable                         |
|   |
| Solids are not applicable                         |
| Solids are not applicable                         |
| No information                                    |
| No information                                    |
| Solids are not applicable                         |
| Water: 20°C 0.72 g/100ml Water: 80°C 2.52 g/100ml |
| No information                                    |
|   |
| No information                                    |
| d <sup>20</sup> 3.26                              |
| Solids are not applicable                         |
| No information                                    |
|   |

# 9. Physical and chemical properties

# 10. Stability and reactivity

| Reactivity :                       | No information                            |  |
|------------------------------------|---|--|
| Chemical stability :               | It becomes dark color gradually by light. |  |
| Possibility of harmful reactions : | No information                            |  |
| Conditions to be avoided :         | Light, heat                               |  |
| Incompatible substances :          | No information                            |  |
| Hazardous degradable organisms :   | Silver, silver oxide, CO <sub>2</sub>     |  |
|                                    |   |  |

## 11. Harmfulness information

| Acute toxicity               |   |
|------------------------------|---|
| Oral :                       | Based on the report that the mouse intraperitoneal LD50 value was 34 mg / kg, but |
|                              | classification is not possible due to lack of data.                               |
| Dermal :                     | Classification is not possible due to lack of data.                               |
| Inhalation : Gases           | The definition of GHS is a solid.   |
| Inhalation : Vapours         | The definition of GHS is a solid.   |
| Inhalation : Dusts and mists | Classification is not possible due to lack of data.                               |
|                              |   |

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| Skin corrosios/irritation :     | Classification is not possible due to lack of data. |
|---------------------------------|---|
| Serious eye damage/irritation : | Classification is not possible due to lack of data. |
| Respiratory sensitization :     | Classification is not possible due to lack of data. |
| Skin sensitization :            | Classification is not possible due to lack of data. |
| Germ-cell mutagenicity :        | Classification is not possible due to lack of data. |
| Carcinogenicity :               | Classification is not possible due to lack of data. |
| Reproductive toxicity :         | Classification is not possible due to lack of data. |
| Specific target organ toxicity  | Classification is not possible due to lack of data. |
| (single exposure) :             |   |
| Specific target organ toxicity  | Classification is not possible due to lack of data. |
| (repeated exposure ) :          |   |
| Aspiration hazard :             | Classification is not possible due to lack of data. |
|                                 |   |

# 12. Ecological information

| Toxicity                             |  |
|--------------------------------------|--|
| Hazardous to the aquatic environment | Classification is not possible due to lack of data.                                |
| (acute) :                            |  |
| Hazardous to the aquatic environment | Classification is not possible due to lack of data.                                |
| (chronic) :                          |  |
| Persistence and degradability :      | No information   |
| Bioaccumulative potential :          | No information   |
| Mobility in soil :                   | No information   |
| Hazard to the ozone layer :          | The materials concerned are not listed by an affiliated book of Montreal Protocol. |
|                                      |  |

# 13. Disposal precautions:

| 15. Disposal precautions.        |  |
|----------------------------------|--|
| Residual waste :                 | Prior to disposal, treatments such as detoxification, stabilization and neutralization are |
|                                  | carried out to the extent possible to reduce the hazard level.                             |
|                                  | Dispose in accordance with relevant laws and local government standards.                   |
|                                  | Outsource to an industrial waste disposal contractor licensed by the prefectural governor, |
|                                  | or if a local public entity does the disposal, outsource it there.                         |
|                                  | If outsourcing waste disposal, thoroughly notify the disposal companies of the dangers     |
|                                  | and harmfulness before outsourcing.  |
|                                  | Avoid discharging wastewater and washing wastewater containing this substance directly     |
|                                  | into rivers, or landfill, or dumping.  |
| Dirty containers and packaging : | Suitably process containers according to the relevant regulations and local government     |
|                                  | standards.   |
|                                  | When disposing of empty containers, make sure to discard the contents completely.          |
|                                  |  |

# 14. Transport information

| 1                                  |  |
|------------------------------------|--|
| International regulations          |  |
| UN No. :                           | No information   |
| Proper shipping name :             | No information   |
| Class :                            | No information   |
| Sub risk :                         | No information   |
| Packing group :                    | No information   |
| Marine pollutant (sea) :           | Not applicable   |
| Transport in bulk according to     | Not applicable   |
| Annex II of MARPOL 73/78           |  |
| and the IBC code :                 |  |
|                                    |  |
| Japanese regulations               |  |
| Land regulations information :     | Obey poisonous and deleterious substances control act. |
| Maritime regulations information : | Obey ship safety law regulations.                      |
| Aviation regulations information : | Obey the civil aeronautics law.                        |
|                                    |  |

| Special safety measures : | Yellow card must be held required during transport.                                  |
|---------------------------|--|
|                           | Do not transport together with food or livestock feed.                               |
|                           | Do not add heavy goods.  |
|                           | When transporting, avoid direct sunlight, load containers without damage, corrosion, |
|                           | or leakage, and securely prevent collapse of cargo.                                  |

| 15. | Regulatory | information ( | (Japanese law) |
|-----|------------|---------------|----------------|
| 1   | regulatory | mitormation   | (supunese iuw) |

|                                      | ·   |
|--------------------------------------|---|
| Poisonous and deleterious substances | Deleterious substance not for medical use (Article 2-1-24 of cabinet order)     |
| control act                          | t:  |
| PRTR :                               | Class I designated chemical substance   |
|                                      | (Appended table 1 105 Silver and its water-soluble compounds.)                  |
| Industrial safety and health act :   | Dangerous or Harmful Substances Subject to Be Indicated their Names             |
|                                      | (Article 57 of the act, Article 18 of the Cabinet Order, Appendix Table 9)      |
|                                      | Dangerous or Harmful Substances Whose Names, etc. Should Be Notified            |
|                                      | (Article 57-2 of the act, Article 18-2 of the Cabinet Order, Appendix Table 9)  |
|                                      | Dangerous or Harmful Substances for which a risk assessment should be conducted |
|                                      | (Article 57-3 of the act)   |
| Air pollution control act            | Hazardous air pollutants (45 of Central environment council 9th report)         |
|                                      |   |

\*Laws and regulations are examples and do not cover domestic laws and regulations.

| Other information  |   |
|--------------------|---|
| References, etc. : | GHS classification results database: NITE website                             |
|                    | GHS model SDS information: JISHA website                                      |
|                    | Ministry of health, labor and welfare website                                 |
|                    | RTECS:2000  |
|                    | JIS Z7252:2019  |
|                    | JIS Z7253 : 2019  |
|                    | Selection Manual for Protective Equipment for Prevention of Skin Damage, etc. |
|                    | (Ministry of Health, Labour and Welfare Feb.2024)                             |

#### \*Caution:

Althoug hazard and harmfulness evaluations are based on the data and information available at the current time, they may not be sufficient.

Please handle with care.

Furthermore, the data and evaluations described herein are not in any way guaranteed. The descriptions refer to normal handling. Regarding special handling, please handle based on the safty measures which are suitable for the intended applications and methods of use.

This SDS is an English translation of a document prepared in Japanese in accordance with JIS Z7253:2019.