



## SAFETY DATA SHEET

**0.1 N AgNO<sub>3</sub>****1. Identification of the substance and of the supplier****Product identifier**Chemical name 0.1 N AgNO<sub>3</sub>**Recommended use of the chemical and restrictions on use**

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**Manufacturer/ supplier details**

Company name **Ya Thai Chemical Co., Ltd.**  
 Company address 78/9 Moo 5 Takam, Bangpakong,  
 Chachoengsao 24130 THAILAND  
 Phone number 66-3857-4400  
 Fax 66-3857-3700  
 Emergency phone number -

**2. Hazard Identification****GHS classification of the substance/ mixture****Health hazards**

Skin corrosion/ irritation Category 2

**Environmental hazards**

Hazardous to the aquatic environment - short term (acute) Category 1

Hazardous to the aquatic environment - long term (chronic) Category 1

Other hazard than mentioned above are "Not classified", "Classification not possible" or "Not applicable".

**GHS label elements****Pictogram****Signal word**

Warning

**Hazard statements**

H315 Causes skin irritation.

H410 Very toxic to aquatic life with long lasting effects.

**Precautionary statements****Prevention**

P264 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P280 Wear protective gloves.

P273 Avoid release to the environment.

**Response**

P302+P352 IF ON SKIN: Wash with plenty water.

P332+P317 If skin irritation occurs: Get medical advice/ attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P391 Collect spillage.

### 3. Composition/ Information on Ingredients

Substance/ mixture	Mixture (liquid)	CAS No.	Concentration %
<b>Components</b>			
Silver nitrate		7761-88-8	1.7
Water		7732-18-5	Balance

### 4. First Aid Measures

#### Description of first aid measure

Inhalation

Remove to fresh air. Get medical attention.

Skin contact

Immediately flush skin with plenty of water, then wash with soap. Remove contaminated clothing and shoes. Wash clothing before reuse.

Eye contact

Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Ingestion

Immediately drink plenty of water to induce vomiting. Get medical attention if symptoms appear.

#### Most important symptoms and effects, both acute and delayed

Irritating to the eyes, skin, respiratory tract and ingestion.

#### Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

### 5. Fire Fighting Measures

#### Extinguishing media

Suitable extinguishing media

Use water spray, dry chemical powder, foam or carbon dioxide.

Unsuitable extinguishing media

No information available.

#### Special hazards arising from the substance or mixture

Gives off irritating or toxic fumes (or gases) in a fire.

When heated to decomposition it emits toxic fumes of nitrogen oxides.

#### Special protective equipment and precautions for fire-fighters

Wear self-contained breathing apparatus (SCBA) for firefighting.

Keep away from heat, sources of ignition, and wear protective equipment.

### 6. Accidental Release Measures

#### Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required.

Keep unprotected persons away.

In case of insufficient ventilation, wear suitable respiratory equipment.

#### Environmental precautions

Do not let product enter drains. Keep water away from release.

Stop or control the leak, if this can be done without undue risk.

#### Methods and materials for containment and cleaning up

Liquid form, collect for reclamation or absorb in vermiculite, dry sand, earth, or a

similar material.

For small spills, add absorbent or sand, scoop up material and place in a sealable, liquid-proof container for disposal. For large spills, contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.

## 7. Handling and Storage

### Precautions for safe handling

- Use personal protective equipment as required.
- Avoid contact with eyes, skin and clothing.
- Wash face, hands and any exposed skin thoroughly after handling.
- Worker should immediately wash the skin when it becomes contaminated.
- Do not breathe gas/ fumes/ vapour/ spray.
- In case of insufficient ventilation, wear suitable respiratory equipment.

### Conditions for safe storage, including any incompatibilities

- Keep container tightly closed in dark, dry and well-ventilated place.

## 8. Exposure Controls/ Personal Protection

### Control parameters

Component	ACGIH (TLV)	NIOSH (REL)	OSHA (PEL)
Silver nitrate 7761-88-8	-	-	-

### Appropriate engineering controls

- Use ventilation, local exhaust ventilation.

### Personal protective equipment

- |                               |  |
|-------------------------------|--|
| <b>Respiratory protection</b> | Use local exhaust or respirator masks. |
| <b>Skin protection</b>        | Protective gloves.                     |
| <b>Eye/ face protection</b>   | Wear safety goggles, safety glasses.   |
| <b>Body protection</b>        | Chemical suit, boots, aprons.          |

### Work/ hygienic practices

- Handle in accordance with good industrial hygiene and safety practice.
- Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
- Wash face, hands and any exposed skin thoroughly after handling.
- Use only outdoors or in a well-ventilated area.
- Wash hands before breaks and at the end of work.

## 9. Physical and Chemical Properties

Appearance and colour	Liquid, colourless
Odour	Odourless
Odour threshold	Not available
pH	6.00-7.00
Melting point/ freezing point	Not available
Initial boiling point and boiling range	> 100 °C
Flash point	Not flammable
Evaporation rate	Not available
Flammability	Not available
Upper/ lower flammability or explosive limits	Not available
Vapour pressure	Not available
Vapour density	Not available
Specific gravity	1.00-1.10

Water solubility	Soluble in water
Partition coefficient: n-octanol/water log Pow	Not available
Auto ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available

## 10. Stability and Reactivity

### Reactivity

Not available.

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

Will not occurred.

### Conditions to avoid

Not applicable.

### Incompatible materials

Incompatible with strong acids and bases. Incompatible with oxidizing agents.

### Hazardous decomposition products

When heated to decomposition it emits toxic fumes of nitrogen oxides.

## 11. Toxicological Information

### Numerical measures of toxicity

Classification of health hazards

#### Acute toxicity

Acute oral toxicity

- Silver nitrate: LD<sub>50</sub> 1,173 mg/kg (rat)

Summation method:

ATE<sub>mix</sub>: >5,000 mg/kg = Classified not possible.

Acute dermal toxicity

Not classified.

Acute inhalation toxicity

Not classified.

#### Skin corrosion/ irritation

H315 Causes skin irritation.

#### Serious eye damage/ eye irritation

All ingredients in this mixture are not serious eye damage/ eye irritation effect.

#### Respiratory or skin sensitization

All ingredients in this mixture are not respiratory or skin sensitization effect.

#### Germ cell mutagenicity

All ingredients in this mixture are not germ cell mutagenicity effect.

#### Carcinogenicity

All ingredients in this mixture are not carcinogenicity effect.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Components	ACGIH	IARC	NTP	OSHA
Silver nitrate 7761-88-8	Not listed	Not listed	Not listed	Not listed

#### Reproductive toxicity

All ingredients in this mixture are not reproductive toxicity.

#### Specific target organ toxicity (single exposure)

All ingredients in this mixture are not specific target organ toxicity (single exposure) effect.

#### Specific target organ toxicity (repeated exposure)

All ingredients in this mixture are not specific target organ toxicity (repeated exposure) effect.

#### Aspiration hazard

All ingredients in this mixture are not aspiration hazard effect.

## 12. Ecological Information

### Ecotoxicity

Components	Algae/ aquatic plants	Fish	Crustacea
Silver nitrate 7761-88-8	-	- Oncorhynchus mykiss (rainbow trout): LC <sub>50</sub> 0.00148 mg/L/96hr flow-through	- Daphnia magna (water flea) LC <sub>50</sub> : 0.0013 mg/L/48hr <sup>renewal</sup>

#### Acute (short-term) aquatic hazard

- Silver nitrate: LC<sub>50</sub> 0.00148 mg/L/96hr  
Oncorhynchus mykiss (fish)

#### Long-term aquatic hazard

#### Persistence and degradability

#### Bio-accumulative potential

#### Mobility in soil

#### Other adverse effects

#### Environmental effects

#### Summation method:

EC50<sub>mix</sub>: 0.086 mg/l = Category 1: Very toxic to aquatic life.

Not classified

Not available

Not available

Not available

Not available

May cause long lasting harmful effects to aquatic life.

## 13. Disposal Consideration

### Waste treatment methods

Dispose in accordance with local/ national/ international regulations.

### Contaminated packaging

Dispose of as unused product.

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

## 14. Transport Information

### International regulation

#### UN number

UN1760

#### UN proper shipping name

Corrosive liquids, n.o.s. (silver nitrate solution)

#### Transport hazard class

8

#### Packaging group

III

#### Environmental hazards

Not available

#### Transport in bulk

Not available

#### Special precautions for user

Not available

## 15. Regulatory Information

### Safety, health and environmental regulations/ legislation specific for the substance or mixture

#### Thailand

Notification of Ministry of Industry Subject: This chemical not listed on the hazardous substances inventory.  
List of hazardous substances B.E. 2556 (2013) (Annex 5.1)

#### Thailand

Notification of Ministry of Labour Subject: List of hazardous chemicals  
B.E. 2556 (2013) Silver nitrate CAS 7761-88-8 (No.1271)  
Is listed on the hazardous chemicals inventory.

### Chemical safety assessment

For this product a chemical safety assessment was not carried out.

## 16. Other Information

**Created**                    October 20, 2023

### Reference

- 1) GHS Classification Data from NIH (National Institutes of Health) Web Site:  
<https://pubchem.ncbi.nlm.nih.gov/>
- 2) <http://www.inchem.org/>
- 3) <https://cfpub.epa.gov/ecotox/>
- 4) Thailand: Notification of Ministry of Industry Subject: List of hazardous substances B.E. 2556 (2013) (Annex 5.1)
- 5) Thailand: Notification of Ministry of Labour Subject: List of hazardous chemicals B.E. 2556 (2013)

### NOTE:

This information herein is given in good faith, but no warranty, express or implied, is made. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used in caution. Although certain hazards are described herein. We cannot quarantine that These are the only hazards which exist.