## SAFETY DATA SHEET

Version: v1 Revision Date: 2023-11-23 Print Date: 2023-12-02

## SECTION 1:Identification of the substance/mixture and of the company/undertaking

## 1.1 Product identifiers

Product name	: SunTronic® silver nanoparticle ink for inkjet printing
Product Number	: S478480
Brand	: aladdin
CAS-No.	: no data available

## 1.2 Relevant identified uses of the substance or mixture and uses advised against

: Laboratory chemicals, Manufacture of substances

Identified uses

## 1.3 Details of the supplier of the safety data sheet

: Shanghai Aladdin Biochemical Tech Co.,Ltd
: 36 Xinjinqiao Road, Shanghai
: 400-620-6333
: no data available

#### 1.4 Emergency telephone number

Emergency Phone	: 0532-83889090
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## **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) Classification according to Regulation (EC) No 1272/2008

Flammable liquids (Category 2),H225

Acute toxicity,Oral (Category 4),H302

Eye irritation (Category 2),H319

Specific target organ toxicity - repeated exposure (Category 2),Kidney,H373

Short-term (acute) aquatic hazard (Category 1),H400

Long-term (chronic) aquatic hazard (Category 1),H410

## 2.2 GHS Label elements, including precautionary statements

Pictogram	no data available
Signal word	Danger

Hazard statement(s)	
H225	Highly Flammable liquid and vapor
H302	Harmful if swallowed
H319	Causes serious eye irritation
H373	Causes damage to organs through prolonged or repeated exposure
H410	Very toxic to aquatic life with long lasting effects
Precautionary statement(s)	
P210	Keep away from heat, hot surface, sparks, open flames and other ignition
	sources No smoking.
P233	Keep container tightly closed.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P273	Avoid release to the environment.
P391	Collect spillage.
P370+P378	In case of fire: Use to extinguish.

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

## SECTION 3: Composition/information on ingredients

#### 3.2 Mixtures

Synonyms	: no data available
Formula	: no data available
Molecular weight	: no data available

Component
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Classification
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Concentration

## SECTION 4: First aid measures

#### 4.1 Description of first aid measures

General advice

Consult a physician. Show this material safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required. Keep eye wide open while rinsing.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section

11

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

## **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

Suitable extinguishing media Dry powder Dry sand Unsuitable extinguishing media no data available

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

Carbon oxides, Silver/silver oxides Mixture with combustible ingredients.

#### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 5.4 Further information

Use water spray to cool unopened containers.

## SECTION 6: Accidental release measures

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

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. For personal protection see section 8.

#### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

#### 6.4 Reference to other sections

For disposal see section 13.

#### SECTION 7: Handling and storage

## 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Keep away from sources of ignition - No



smoking. Take measures to prevent the build up of electrostatic charge. For precautions see section 2.2.

#### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in cool place. Recommended storage temperature 2 - 8 °C

#### 7.3 Specific end use(s)

no data available

#### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

#### 8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN166(EU).

Skin protection

Gloves must be checked before use. Please use proper methods to remove the gloves (do not touch the outer surface of the gloves), and avoid any skin parts contacting the product. After use, please handle the contaminated gloves carefully according to relevant laws and regulations and effective laboratory rules and procedures. Please clean and blow dry the protective gloves selected for your hands must meet the specifications given in regulation (EU) 2016 / 425 and the en 374 standard derived from it. Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a fullface respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

#### **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

a) Appearance	no data available
b) Odour	no data available

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c) Odour Threshold	no data available
d) pH	no data available
<ul> <li>e) Melting point/freezing point</li> </ul>	no data available
f) Initial boiling point and boiling range	no data available
g) Flash point	22 °C
h) Evaporation rate	no data available
i) Flammability (solid, gas)	no data available
j) Upper/lower flammability or	
explosive limits	no data available
k) Vapour pressure	no data available
l) Vapour density	no data available
m) Relative density	no data available
n) Water solubility	no data available
o) Partition coefficient: n-octanol/wate	r no data available
p) Auto-ignition temperature	no data available
q) Decomposition temperature	no data available
r) Viscosity	no data available
s) Explosive properties N	no data available
t) Oxidizing properties N	no data available

## 9.2 Other safety information

no data available

## **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

no data available

#### 10.2 Chemical stability

Stable under recommended storage conditions.

## 10.3 Possibility of hazardous reactions

no data available

#### 10.4 Conditions to avoid

Heat, flames and sparks.

#### 10.5 Incompatible materials

Strong oxidizing agents

## 10.6 Hazardous decomposition products

Carbon oxides, Silver/silver oxides

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## **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

Acute toxicity no data available Skin corrosion/irritation no data available Serious eye damage/eye irritation no data available Respiratory or skin sensitisation no data available Germ cell mutagenicity no data available Carcinogenicity no data available Reproductive toxicity no data available Specific target organ toxicity - single exposure no data available Specific target organ toxicity - repeated exposure no data available Aspiration hazard no data available Additional Information no data available

## **SECTION 12: Ecological information**

#### 12.1 Toxicity

no data available

#### 12.2 Persistence and degradability

no data available

## 12.3 Bioaccumulative potential

no data available

#### 12.4 Mobility in soil

no data available

## 12.5 Results of PBT and vPvB assessment

no data available

#### 12.6 Other adverse effects

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no data available

## **SECTION 13:**

#### 13.1 Disposal considerations

#### Product

Recycle to process, if possible. Consult your local regional authorities and an expert of disposal. You may be able to dissolve or mix material with a combustible solvent and little by little burn in a chemical incinerator equipped with an afterburner and scrubber system. If a large amount of the substance is burned at a time, an explosion may occur. Observe all federal, state and local regulations when disposing of the substance.

Contaminated packaging

Dispose of as unused product.

## SECTION 14: Transport information

DOT (US)		
UN number: 1993	Packing group: II	Class: 3
Proper shipping name: FLAMMABLE	Reportable Quantity(RQ): no data	Poison Inhalation Hazard: no data
LIQUID, N.O.S. (ethanol, 2-Propanol,	available	available
colloidal silver)		
Environmental Hazards: yes		
IMDG		
UN number: 1993	Packing group: II	EMS-No: no data available
Proper shipping name: FLAMMABLE LIQUID, N.O.S. (ethanol, 2-Propanol, colloidal silver)		
ΙΑΤΑ		
UN number: 1993	Packing group: II	Class: 3
Proper shipping name: FLAMMABLE LIQUID, N.O.S. (ethanol, 2-Propanol, colloidal silver)		

#### **SECTION 15: Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

#### **SECTION 16: Other information**

#### Further information

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