

## Preparing for the New Era of Laboratories

# SAFETY DATA SHEET (SDS)

According to regulation (EU) no.1907/2006

## SILVER SULPHATE 98.5% Extrapure

PRODUCT CODE : 0-5270

CAS No : 10294-26-5

FORMULA : Ag<sub>2</sub>SO<sub>4</sub>

UN No : 3077

 $website \quad : \underline{www.labotiq.net}$ 

#### SAFETY DATA SHEET (SDS) SILVER SULPHATE 98.5% Extrapure



SDS Number: 0500 Date: Sept 1st, 2025 Version: 1.0

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

1.1 Product Name : SILVER SULPHATE 98.5% Extrapure

**Synonyms** : Sulfuric acid disilver (I) salt

CAS No. : 10294-26-5
HS Code : 2843.2900
Chemical Formula : Ag<sub>2</sub>SO<sub>4</sub>
Molecular Weight : 311.80 g/mol
Product Code : 0-5270
Brand : Labotiq
1.2 Manufacturer : Labotiq

Address : Jl.Terapi Raya AD2-Bumi Menteng Asri Bogor, Jawa Barat Indonesia – 16111

Website : www.labotiq.net
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**Emergency number**: +6281316894650

**1.3 Application** : Laboratory chemicals, Manufacture of substances, General Chemical reagent

#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008

Serious eye damage, (Category 1) H318: Causes serious eye damage. Short-term (acute) aquatic hazard, (Category 1) H400: Very toxic to aquatic life.

Long-term (chronic) aquatic hazard, (Category 1) H410: Very toxic to aquatic life with long

lasting effects.

For the full text of the H-Statements mentioned in this Section, see Section 16

#### 2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word Danger

Hazard statement(s)

H318 Causes serious eye damage.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P280 Wear eye protection/ face protection.

minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON

CENTER/ doctor

Supplemental Hazard Statements none

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#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### Ecological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

#### Toxicological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

#### **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Synonyms : Sulfuric acid disilver (I) salt

Formula :  $Ag_2SO_4$ 

Molecular weight : 311.80 g/mol CAS-No. : 10294-26-5 EC-No. : 233-653-7

#### 3.2 Mixture

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Classification	Concentration
Disilver(1+) sulfate CAS-No. 10294-26-5 EC-No. 233-653-7	Eye Dam. 1; Aquatic Acute 1; Aquatic Chronic 1; H318, H400, H410 M- Factor - Aquatic Acute: 1.000 M- Factor - Aquatic Chronic: 100	<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### **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 thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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#### 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

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

No data available

#### **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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

Sulfur oxides, Silver/silver oxides.

#### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 5.4 Further information

No data available

#### **SECTION 6: Accidental release measures**

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

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. 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

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

For disposal see section 13.

#### **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

For precautions see section 2.2.

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

Tightly closed. Dry. Light sensitive.

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#### Storage class

Storage class (TRGS 510): 11: Combustible Solids

#### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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

#### 8.1 Control parameters

Ingredients with workplace control parameters

#### 8.2 Exposure controls

#### **Appropriat engineering controls**

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

#### 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 EN 166(EU).

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

#### **Full contact**

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested:Dermatril® (KCL 740, Size M)

#### Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

Material tested:Dermatril® (KCL 740, Size M)

#### **Body Protection**

Complete suit protecting against chemicals, 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 multi-purpose 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

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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

Appearance Form: crystalline

Colour: white

Odour No data available Odour Threshold No data available pH No data available

Melting point/freezingpoint Melting point/range: 652 °C

Initial boiling point and boiling range No data available Flash point Not applicable Evaporation rate No data available Flammability (solid, gas) No data available Upper/lower flammability or No data available explosive limits No data available Vapour pressure No data available Vapour density No data available Density 5,450 g/cm3 Relative density No data available Water solubility No data available Partition coefficient: noctanol/water No data available Auto-ignition temperature No data available Decomposition temperature No data available Viscosity No data available Explosive properties No data available Oxidizing properties 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

No data available

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#### 10.5 Incompatible materials

Strong oxidizing agents

#### 10.6 Hazardous decomposition products

In the event of fire: see section 5

#### **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

#### **Acute toxicity**

LD50 Oral - Rat - male and female - > 2.000 mg/kg (OECD Test Guideline 401)

Inhalation: No data available Dermal: No data available

#### Skin corrosion/irritation

Eyes - Rabbit

Result: Causes serious eye damage. (OECD Test Guideline 405) Remarks: Risk of permanent damage due to staining of the cornea

#### Serious eye damage/eye irritation

Mixture causes serious eye damage. Risk of blindness!

#### Respiratory or skin sensitisation

No data available

#### Germ cell mutagenicity

Test Type: Micronucleus test Test system: Human lymphocytes

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 487

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Test system: Mouse lymphoma test

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 476

Result: Positive results were obtained in some in vitro tests.

Test Type: Micronucleus test

Species: Rat

Cell type: Bone marrow Application Route: Oral

Method: OECD Test Guideline 474

Result: negative

#### Carcinogenicity

No data available.

#### Reproductive toxicity

No data available

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#### 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

Endocrine disrupting properties

Product:

Assessment:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Repeated dose toxicity - Rat - male and female - Oral - 90 d - NOAEL (No observed adverse effect level) - 30 mg/kg - LOAEL (Lowest observed adverse effect level) - 125 mg/kg

Remarks: Subchronic toxicity (in analogy to similar products)

The value is given in analogy to the following substances: colloidal silver

May cause argyria (a slate-gray or bluish discoloration of the skin and deep tissues due to the deposit of insoluble albuminate of silver). To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

#### **SECTION 12: Ecological information**

#### 12.1 Toxicity

Toxicity to fish

semi-static test LC50 - Pimephales promelas (fathead minnow) - 0,0012 mg/l - 96 h (US-EPA)

Toxicity to daphnia and other aquatic invertebrates semi-static test

LC50 - Daphnia magna (Water flea) - 0,00022 mg/l - 48 h

Remarks: (ECHA)

Toxicity to algae

flow-through test EC10 - Pseudokirchneriella subcapitata (green algae) - 0,00041 mg/l - 24 h

Remarks: (ECHA)

Toxicity to fish(Chronic toxicity)

flow-through test NOEC - Pimephales promelas (fathead minnow) - 0,000351 mg/l - 32 d

Remarks: (ECHA)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) semi-static test EC10 - Ceriodaphnia dubia (water flea) - 0,00248 mg/l - 7 d (US-EPA)

#### 12.2 Persistence and degradability

The methods for determining biodegradability are not applicable to inorganic substances.

#### 12.3 Bioaccumulative potential

Bioaccumulation Cyprinus carpio (Carp) - 41 d at 20 °C(Disilver(1+) sulfate) Bioconcentration factor (BCF): 70

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#### 12.4 Mobility in soil

No data available

#### 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### 12.6 Other adverse effects

Very toxic to aquatic life with long lasting effects.

Endocrine disrupting properties

Product:

Assessment:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

#### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

#### **Contaminated packaging**

Dispose of as unused product.

#### **SECTION 14: Transport information**

14.1 UN number

ADR/RID: 3077 IMDG: 3077 IATA: 3077

14.2 UN proper shipping name

ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Disilver(1+) sulfate) IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Disilver(1+) sulfate)

IATA: Environmentally hazardous substance, solid, n.o.s. (Disilver(1+) sulfate)

14.3 Transport hazard class(es)

ADR/RID: 9 IMDG: 9 IATA: 9

14.4 Packaging group

ADR/RID: III IMDG: III IATA: III

14.5 Environmental hazards

ADR/RID: yes IMDG Marine pollutant: yes IATA: yes

14.6 Special precautions for user

**Further information** 

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.Packages smaller than or equal to 5 kg / L, not dangerous goods of Class 9

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

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

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

#### 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

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

#### Full text of H-Statements referred to under sections 2 and 3.

H318 Causes serious eye damage.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

#### National Fire Protection Association (U.S.A.):

Health: 3

Flammability: 0 Reactivity: 1

#### **Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Labotiq shall not be held liable for any damage resulting from handling or from contact with the above product.

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