

# **SAFETY DATA SHEET**

Revision Date 24-Dec-2021 Revision Number 4

1. Identification

Product Name Silver Sulfate

Cat No.: \$190-25; \$190-100; \$190-500

**CAS No** 10294-26-5 **Synonyms** None

Recommended Use Laboratory chemicals.

Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Fisher Scientific Company One Reagent Lane Fair Lawn, NJ 07410 Tel: (201) 796-7100

Emergency Telephone Number CHEMTREC®, Inside the USA: 800-424-9300

CHEMTREC®, Outside the USA: 001-703-527-3887

# 2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Serious Eye Damage/Eye Irritation Category 1

Label Elements

Signal Word

Danger

**Hazard Statements** 

Causes serious eye damage



## **Precautionary Statements**

### Prevention

Wear protective gloves/protective clothing/eye protection/face protection

#### Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician

#### Hazards not otherwise classified (HNOC)

Very toxic to aquatic life with long lasting effects

# 3. Composition/Information on Ingredients

Component	CAS No	Weight %
Sulfuric acid, disilver(1+) salt	10294-26-5	> 98

# 4. First-aid measures

**General Advice** If symptoms persist, call a physician.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists,

call a physician.

**Inhalation** Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if

symptoms occur.

Ingestion Clean mouth with water and drink afterwards plenty of water. Get medical attention if

symptoms occur.

Most important symptoms and

effects

Causes eye burns. Causes severe eye damage.

Notes to Physician Treat symptomatically

# 5. Fire-fighting measures

Unsuitable Extinguishing Media No information available

Flash Point Not applicable

**Method -** No information available

**Autoignition Temperature** 

Explosion Limits

No information available

Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

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### Specific Hazards Arising from the Chemical

Do not allow run-off from fire-fighting to enter drains or water courses.

#### **Hazardous Combustion Products**

None known.

### **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health	Flammability	Instability	Physical hazards
3	0	1	N/A

Accidental release measures

Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust **Personal Precautions** 

formation.

**Environmental Precautions** Do not flush into surface water or sanitary sewer system. Do not allow material to

contaminate ground water system. Prevent product from entering drains. Local authorities

should be advised if significant spillages cannot be contained.

Methods for Containment and Clean Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed Up

containers for disposal.

Handling and storage

Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Wear personal Handling

protective equipment/face protection. Avoid ingestion and inhalation. Avoid dust formation.

Keep containers tightly closed in a dry, cool and well-ventilated place. Storage.

# 8. Exposure controls / personal protection

### **Exposure Guidelines**

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
Sulfuric acid, disilver(1+) salt	TWA: 0.01 mg/m <sup>3</sup>	(Vacated) TWA: 0.01 mg/m <sup>3</sup>	IDLH: 10 mg/m <sup>3</sup>	TWA: 0.01 mg/m <sup>3</sup> TWA: 0.1
	_		TWA: 0.01 mg/m <sup>3</sup>	mg/m³

### Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH IDLH: NIOSH - National Institute for Occupational Safety and Health

**Engineering Measures** Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protective Equipment

**Eye/face Protection** Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard **Respiratory Protection** 

EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Handle in accordance with good industrial hygiene and safety practice. **Hygiene Measures** 

# 9. Physical and chemical properties

Physical StateSolidAppearanceWhiteOdorOdorless

Odor Threshold No information available

рΗ

Melting Point/Range652.2 °C / 1206 °FBoiling Point/Range1085 °C / 1985 °FFlash PointNot applicableEvaporation RateNot applicable

Flammability (solid,gas)

No information available

Flammability or explosive limits

UpperNo data availableLowerNo data availableVapor PressurenegligibleVapor DensityNot applicable

Specific Gravity 5.5

SolubilitySoluble in waterPartition coefficient; n-octanol/waterNo data availableAutoignition TemperatureNo information availableDecomposition TemperatureNo information availableViscosityNot applicable

ViscosityNot applieMolecular FormulaAg2O4SMolecular Weight311.79

# 10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Light sensitive.

Conditions to Avoid Incompatible products.

Incompatible Materials Strong oxidizing agents

Hazardous Decomposition Products None under normal use conditions

**Hazardous Polymerization** Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

# 11. Toxicological information

**Acute Toxicity** 

Product Information Component Information

Toxicologically Synergistic No information available

**Products** 

Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Irritation** Causes eye burns

Sensitization No information available

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

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Sulfuric acid,	10294-26-5	Not listed				
disilver(1+) salt						

**Mutagenic Effects** No information available

Reproductive Effects No information available.

**Developmental Effects** No information available.

No information available. **Teratogenicity** 

STOT - single exposure None known STOT - repeated exposure None known

**Aspiration hazard** No information available

Symptoms / effects,both acute and No information available

delayed

No information available **Endocrine Disruptor Information** 

**Other Adverse Effects** The toxicological properties have not been fully investigated.

# 12. Ecological information

#### **Ecotoxicity**

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment.

Persistence and Degradability No information available

**Bioaccumulation/ Accumulation** No information available.

No information available. **Mobility** 

## 13. Disposal considerations

**Waste Disposal Methods** 

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT Not regulated TDG Not regulated Not regulated IATA IMDG/IMO Not regulated

# 15. Regulatory information

### **United States of America Inventory**

Component	CAS No	TSCA	TSCA Inventory notification -	TSCA - EPA Regulatory
			Active-Inactive	Flags
Sulfuric acid, disilver(1+) salt	10294-26-5	Χ	ACTIVE	-

### Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

### **International Inventories**

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Sulfuric acid, disilver(1+) salt	10294-26-5	Χ	-	233-653-7	Χ	Χ	Χ	Χ	Χ	KE-12273

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

#### U.S. Federal Regulations

### **SARA 313**

Component	CAS No	Weight %	SARA 313 - Threshold Values %
Sulfuric acid, disilver(1+) salt	10294-26-5	> 98	1.0

SARA 311/312 Hazard Categories See section 2 for more information

**CWA (Clean Water Act)** 

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Sulfuric acid, disilver(1+) salt	-	-	X	-

Clean Air Act Not applicable

**OSHA** - Occupational Safety and

Health Administration

Not applicable

CERCLA Not applicable

**California Proposition 65** This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Sulfuric acid, disilver(1+)	-	X	X	-	-
salt					

### **U.S. Department of Transportation**

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland

Security

This product does not contain any DHS chemicals.

**Other International Regulations** 

Mexico - Grade No information available

Authorisation/Restrictions according to EU REACH

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

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
					oubstances (Norto)
Sulfuric acid, disilver(1+) salt	10294-26-5	Not applicable	Not applicable	Not applicable	Not applicable

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Sulfuric acid, disilver(1+) salt	10294-26-5	Not applicable	Not applicable	Not applicable	Not applicable

# 16. Other information

Prepared By Regulatory Affairs

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**Revision Summary** This document has been updated to comply with the US OSHA HazCom 2012 Standard

replacing the current legislation under 29 CFR 1910.1200 to align with the Globally

Harmonized System of Classification and Labeling of Chemicals (GHS).

#### Disclaimer

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, use, processing, storage, transportation, disposal and release 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

**End of SDS**