## 1. Identification of the substance/preparation and of the company/undertaking

Identification of the product

Silver sulfate

Manufacturer/supplier identification

Company: Guangdong Guanghua Sci-Tech Co.,Ltd

Address: No.295 Daxue Road, Shantou

PostCode:515000

E-mail: export@ghtech.com

Emergency telephone No.: +86-754-82515813.

Fax No.: +86-754-88221999

#### 2. Hazards identification

# Classification of the substance or mixture

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

Serious eye damage (Category 1) Acute aquatic toxicity (Category 1) Chronic aquatic toxicity (Category 1)

#### Label elements

Pictogram



## Signal word Danger

Hazard statement(s)

H319 Causes serious eye irritation.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protection/ face

P305 + P351 + P338+P310 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P391 Collect spillage.

P501 Dispose of contents/ container to an approved waste disposal plant.

Supplemental Hazard Statements

none

# 3. Composition/information on ingredients

Synonyms
Silver sulfate

CAS-No.: 10294-26-5 *M*: 311.80g/mol

Molecular formula: Ag<sub>2</sub>SO<sub>4</sub>

# 4. First aid measures

## If inhaled

After inhalation: fresh air. Call in physician.

## In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.

# In case of eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist.

Remove contact lenses.

#### If swallowed

After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise.5. Fire-fighting measures

## 5. Fire-fighting measures

## Suitable extinguishing media

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

## Special hazards arising from the substance or mixture

Sulfur oxides Silver/silver oxides Not combustible. Ambient fire may liberate hazardous vapours.

## **Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

## 6. Accidental release measures

## **Personal precautions**

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition.

Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.Environmental precautions

Do not let product enter drains.

# Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions(see sections 7 and 10). Take up with liquid-absorbent and neutralising material (e.g.Chemizorb® OH<sup>-</sup>, Merck Art. No. 101596). Dispose of properly. Clean up affected area.

## 7. Handling and storage

## **Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

# **Conditions for safe storage**

Tightly closed.

Recommended storage temperature see product label.

#### 8. Exposure controls/personal protection

## **Appropriate engineering controls**

General industrial hygiene practice.

## Personal protective equipment

## **Eye/face protection**

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.

# **Body Protection**

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

# **Respiratory protection**

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

# Control of environmental exposure

Do not let product enter drains.

# 9. Physical and chemical properties

Form: crystals
Colour: Colorless
Odour: not available
pH value: not available

**Melting point:**655 ℃ at 1.010 hPa

Boiling point: not available

**Ignition temperature:** not available

Flash point: not available

Autoignition temperature: not available

**Explosion limits** 

**lower:** not available **upper:** not available **Density:** 5.45g/cm<sup>3</sup>

**Bulk density:** not available

Solubility in

water (20 ℃): Soluble in water diluted acids (20 ℃): not available Thermal decomposition: not available

# 10. Stability and reactivity

# Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

# Conditions to avoid

Light environment

## Materials to avoid

Strong oxidizing agents

# Hazardous decomposition products

Sulfur oxides Silver/silver oxides.

## 11. Toxicological information

**Acute toxicity** 

LD50 Oral - Rat - male and female - 5000 mg/kg

(OECD Test Guideline 401)

# Serious eye damage/eye irritation

No data available

# Respiratory or skin sensitization

No data available

## Germ cell mutagenicity

No data available

## Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

# Specific target organ toxicity - single exposure

No data available

# Specific target organ toxicity - repeated exposure

no data available

## **Aspiration hazard**

no data available

## 12. Ecological information

### **Toxicity**

No data available

# Persistence and degradability

no data available

# **Bioaccumulative potential**

No data available

## Mobility in soil

no data available

## PBT and vPvB assessment

no data available

# Other adverse effects

Biological effects:

Harmful effect due to pH shift.

When discharged properly, no impairments in the function of adapted biological wastewater treatment plants are to be expected.

Discharge into the environment must be avoided.

## 13. Disposal considerations

#### Product

See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

# Contaminated packaging

Dispose of as unused product.

## 14. Transport information

## ADR/RID

UN-Number:3077 Class: 9 Packing group:III

Proper shipping name: Hazardous to the environment, liquid, not otherwise specified (silver sulfate solution)

## **IMDG**

UN-Number:3077 Class: 9 Packing group:III

Proper shipping name: Hazardous to the environment, liquid, not otherwise specified (silver sulfate solution)

Marine pollutant:Yes

# **IATA**

UN-Number:3077 Class: 9 Packing group:III

Proper shipping name: Hazardous to the environment, liquid, not otherwise specified (silver sulfate solution)

# 15. Regulatory information

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

## 16. Other information

General update.

Regional representation:

This information is given on the authorised Safety Data Sheet for your country.