

## Safety Data Sheet dated 11/4/2023, version 7

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

1.1. Product identifier

Identification of the substance

Trade name: B108 - Silver Sulfate ACS Grade

 Trade code:
 B108

 CAS number:
 10294-26-5

 EC number:
 233-653-7

REACH: The substance is not subject to registration as it is produced in amounts less than 1

on/year

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

Recommended use:

Galvanic, base and lab chemistry

1.3. Details of the supplier of the safety data sheet

Company:

CABRO SPA - AREZZO Road Setteponti 141 52100 - Italy

CABRO SPA Phone n. +39 0575 984442

Office hours: 9-13 / 14.30-17.30

Competent person responsible for the safety data sheet:

info@cabro.it

1.4. Emergency telephone number

CABRO SPA

Phone n. +39 0575 984442 Office hours: 9-13 / 14.30-17.30

Single European emergency number: 112

Poison Information Center - 24/24h Foggia Hospital - Phone +39 0881-732326 Poison Information Center - 24/24h Bergamo Hospital - Phone +39 800 883300

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

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

- Danger, Eye Dam. 1, Causes serious eye damage.
- Danger, Repr. 1B, May damage the unborn child.
- Warning, Aquatic Acute 1, Very toxic to aquatic life.
- Warning, Aquatic Chronic 1, Very toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

## 2.2. Label elements

Hazard pictograms:



Danger

Hazard statements:

H318 Causes serious eye damage. H360D May damage the unborn child.

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H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P273 Avoid release to the environment.

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

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P310 Immediately call a POISON CENTER/doctor.

P391 Collect spillage.

**Special Provisions:** 

None

Contains

Silver sulfate

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

#### 2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%

Other Hazards:

No other hazards

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

#### 3.1. Substances

Identification of the substance

Chemical characterization: B108 - Silver Sulfate ACS Grade

Trade code: B108
CAS number: 10294-26-5
EC number: 233-653-7

Qty	Name	ldent. Number		Classification
100 %	Silver sulfate	CAS: EC:	233-653-7	<ul> <li>         ⇒ 3.3/1 Eye Dam. 1 H318         ⇒ 3.7/1B Repr. 1B H360D         ⇒ 4.1/A1 Aquatic Acute 1 H400         M=1000.         ⇒ 4.1/C1 Aquatic Chronic 1         H410 M=100.     </li> </ul>

M factor:

M: 1000

M (chronic): 100

3.2. Mixtures

N.A.

## **SECTION 4: First aid measures**

## 4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

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### **OBTAIN IMMEDIATE MEDICAL ATTENTION.**

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

### In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

#### In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

#### In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

None

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None

## **SECTION 5: Firefighting measures**

### 5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO2).

Extinguishing media which must not be used for safety reasons:

None in particular.

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

Do not inhale combustion gases

Burning produces heavy smoke.

## 5.3. Advice for firefighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains

Move undamaged containers from immediate hazard area if it can be done safely.

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

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

For non emergency personnel:

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

For emergency responders:

Wear personal protection equipment.

### 6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

### 6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

## 6.4. Reference to other sections

See also section 8 and 13



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

#### 7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Exercise the greatest care when handling or opening the container.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

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

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

## 7.3. Specific end use(s)

None in particular

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

#### 8.1. Control parameters

B108 - Silver Sulfate ACS Grade - CAS: 10294-26-5

TLV TWA - 0,01 mg/m3

**DNEL Exposure Limit Values** 

N.A.

**PNEC Exposure Limit Values** 

Silver sulfate - CAS: 10294-26-5

Target: Fresh Water - Value: 40 ng/L Target: Marine water - Value: 860 ng/L

Target: Sewage treatment plant - Value: 25 μg/l

Target: Freshwater sediments - Value: 438.13 mg/kg dwt Target: Marine water sediments - Value: 438.13 mg/kg dwt

#### 8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

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

9.1. Information on basic physical and chemical properties



Properties	Value	Method:	Notes	
Physical state:	Solid		Powder	
Colour:	White			
Odour:	odorless			
Melting point/freezing point:	655 °C	_		
Boiling point or initial boiling point and boiling range:	N.A.			
Flammability:	Non- flammable			
Lower and upper explosion limit:	N.A.	_		
Flash point:	N.A.			
Auto-ignition temperature:	N.A.			
Decomposition temperature:	N.A.			
pH:	N.A.			
Kinematic viscosity:	N.A.			
Solubility in water:	8.16 - 8.26 g/ L @ 20 °C - pH 5.1 - 5.5			
Solubility in oil:	N.A.			
Partition coefficient n- octanol/water (log value):	N.A.			
Vapour pressure:	N.A.			
Density and/or relative density:	N.A.			
Relative vapour density:	N.A.			
Particle characteristics:				
Particle size:	N.A.			

## 9.2. Other information



Properties	Value	Method:	Notes
Miscibility:	N.A.		-

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

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

## **SECTION 11: Toxicological information**

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicological information of the substance:

B108 - Silver Sulfate ACS Grade - CAS: 10294-26-5

a) acute toxicity

Not classified

Based on available data, the classification criteria are not met

b) skin corrosion/irritation

Not classified

Based on available data, the classification criteria are not met

c) serious eye damage/irritation

The product is classified: Eye Dam. 1 H318

d) respiratory or skin sensitisation

Not classified

Based on available data, the classification criteria are not met

e) germ cell mutagenicity

Not classified

Based on available data, the classification criteria are not met

f) carcinogenicity

Not classified

Based on available data, the classification criteria are not met

g) reproductive toxicity

The product is classified: Repr. 1B H360D

h) STOT-single exposure

Not classified

Based on available data, the classification criteria are not met

i) STOT-repeated exposure

Not classified

Based on available data, the classification criteria are not met

j) aspiration hazard

Not classified

Based on available data, the classification criteria are not met

#### 11.2. Information on other hazards

Endocrine disrupting properties:

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No endocrine disruptor substances present in concentration >= 0.1%

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

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

B108 - Silver Sulfate ACS Grade - CAS: 10294-26-5

The product is classified: Aquatic Acute 1 - H400; Aquatic Chronic 1 - H410

a) Aquatic acute toxicity:

Endpoint: EC10 - Species: Fish = 0.00019 mg/l - Duration h: 1736 Endpoint: EC50 - Species: Daphnia = 0.004 mg/l - Duration h: 48

Silver sulfate - CAS: 10294-26-5

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 1.2 µg/l - Duration h: 96

Endpoint: LC50 - Species: Invertebrates = 220 ng/L - Duration h: 48

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Endocrine disrupting properties

No endocrine disruptor substances present in concentration >= 0.1%

12.7. Other adverse effects

None

## **SECTION 13: Disposal considerations**

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

## **SECTION 14: Transport information**





14.1. UN number or ID number

ADR-UN Number: 3077 IATA-UN Number: 3077 IMDG-UN Number: 3077

14.2. UN proper shipping name

ADR-Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S. (Silver sulfate)

IATA-Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S. (Silver sulfate)

IMDG-Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S. (Silver sulfate)

14.3. Transport hazard class(es)

ADR-Class:

ADR - Hazard identification number: 90

IATA-Class: 9
IATA-Label: 9

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IMDG-Class: 9

14.4. Packing group

Ш ADR-Packing Group: IATA-Packing group: Ш IMDG-Packing group: Ш

14.5. Environmental hazards

ADR-Environmental Pollutant: Yes

IMDG-Marine pollutant: Marine Pollutant

F-A, IMDG-EmS: S-F

14.6. Special precautions for user

ADR-Subsidiary hazards:

ADR-S.P.: 274 335 375 601

ADR-Transport category (Tunnel restriction code): 3 (-)

IATA-Passenger Aircraft: 956 IATA-Subsidiary hazards: IATA-Cargo Aircraft: 956

IATA-S.P.: A97 A158 A179 A197 A215

IATA-ERG: 9L IMDG-Subsidiary hazards:

IMDG-Stowage and handling: Category A SW23

IMDG-Segregation:

14.7. Maritime transport in bulk according to IMO instruments

N.A.

## **SECTION 15: Regulatory information**

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH) Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 2020/878

Regulation (EU) n. 286/2011 (ATP 2 CLP) Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

Regulation (EU) n. 2020/217 (ATP 14 CLP)

Regulation (EU) n. 2020/1182 (ATP 15 CLP)

Regulation (EU) n. 2021/643 (ATP 16 CLP) Regulation (EU) n. 2021/849 (ATP 17 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

No restriction.

Restrictions related to the substances contained:

No restriction.

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Where applicable, refer to the following regulatory provisions:

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III): Seveso III category according to Annex 1, part 1 Product belongs to category: E1

### 15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the substance.

## **SECTION 16: Other information**

Full text of phrases referred to in Section 3:

H318 Causes serious eye damage.

H360D May damage the unborn child.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Hazard class and hazard category	Code	Description	
Eye Dam. 1	3.3/1	Serious eye damage, Category 1	
Repr. 1B	3.7/1B	Reproductive toxicity, Category 1B	
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1	
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1	

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

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