



Preparing for the New Era of Laboratories

MATERIAL SAFETY DATA SHEET (MSDS)

According to regulation (EU) no.1907/2006

HYDROXYLAMINE SULPHATE 99% AR

PRODUCT CODE : O-5099

CAS No : 10039-54-0

FORMULA : $(\text{NH}_2\text{OH})_2 \cdot \text{H}_2\text{SO}_4$

UN No : 2865

MATERIAL SAFETY DATA SHEET (SDS/MSDS)

HYDROXYLAMINE SULPHATE 99% AR



MSDS Number : 0188

Date : February 19th, 2025

Version : 1.0

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

- 1.1 Product Name** : HYDROXYLAMINE SULPHATE 99% AR
Synonyms : Hydroxylammonium sulfate
CAS No. : 10039-54-0
HS Code : 2825 1040
Chemical Formula : $(\text{NH}_2\text{OH})_2 \cdot \text{H}_2\text{SO}_4$
Molecular Weight : 164.14 g/mol
Product Code : O-5099
Brand : Labotiq
1.2 Manufacturer : Labotiq
Address : Jl.Terapi Raya AD2-Bumi Menteng Asri Bogor, Jawa Barat Indonesia – 16111
Website : www.labotiq.net
Email : labotiq.id@gmail.com
For information : Phone : (+62-251) 839110, 8311662, Fax : (+62-251) 83135710
Emergency number : +6281316894650
1.3 Application : Laboratory chemicals, Manufacture of substances

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Corrosive to Metals (Category 1), H290
 Acute toxicity, Oral (Category 4), H302
 Acute toxicity, Dermal (Category 4), H312
 Skin irritation (Category 2), H315 Eye irritation (Category 2), H319
 Skin sensitization (Category 1), H317
 Carcinogenicity (Category 2), H351
 Specific target organ toxicity - repeated exposure, Oral (Category 2), Blood, H373
 Short-term (acute) aquatic hazard (Category 1), H400

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

Adverse physicochemical, human health and environmental effects
 No additional information available

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word

warning

Hazard statement(s)

H290

May be corrosive to metals.

H302 + H312

Harmful if swallowed or in contact with skin.

H315

Causes skin irritation.

H317

May cause an allergic skin reaction.

H319

Causes serious eye irritation.

H351

Suspected of causing cancer.

MATERIAL SAFETY DATA SHEET (SDS/MSDS)

HYDROXYLAMINE SULPHATE 99% AR



MSDS Number : 0188

Date : February 19th, 2025

Version : 1.0

H373	May cause damage to organs (Blood) through prolonged or repeated exposure if swallowed.
H400	Very toxic to aquatic life.
Precautionary statement(s)	
P273	Avoid release to the environment.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P312	IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.
P302 + P352 + P312	IF ON SKIN: Wash with plenty of water.Call a POISON CENTER/ doctor if you feel unwell.
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.
Supplemental Hazard Statements	none

Reduced Labeling (<= 125 ml)

Pictogram



Signal word	Warning
Hazard statement(s)	
H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer.
Precautionary statement(s)	
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
Supplemental Hazard Statements	none

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. Rapidly absorbed through skin.

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

MATERIAL SAFETY DATA SHEET (SDS/MSDS)

HYDROXYLAMINE SULPHATE 99% AR



MSDS Number : 0188

Date : February 19th, 2025

Version : 1.0

3.1 Substances

Synonyms : Hydroxylammonium sulfate
 Formula : $H_6N_2O_2 \cdot H_2O_4S$
 Molecular weight : 164,14 g/mol
 CAS-No. : 10039-54-0
 EC-No. : 233-118-8
 Index-No. : 612-123-00-2

3.2 Mixture

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

Component	Classification	Concentration
bis(hydroxylammonium)sulphate CAS-No. 10039-54-0 EC-No. 233-118-8 Index-No. 612-123-00-2	Met. Corr. 1; Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; Skin Sens. 1; Carc. 2; STOT RE 2; Aquatic Acute 1; H290, H302, H312, H315, H319, H317, H351, H373, H400 M-Factor - Aquatic Acute: 1	<=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

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

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. Consult a physician.

In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

If swallowed

After swallowing: immediately make victim drink water (two glasses at most). 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

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 extinguishing measures that are appropriate to local circumstances and the surrounding environment.

MATERIAL SAFETY DATA SHEET (SDS/MSDS)
HYDROXYLAMINE SULPHATE 99% AR

MSDS Number : 0188

Date : February 19th, 2025

Version : 1.0

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given

5.2 Special hazards arising from the substance or mixture

Nitrogen oxides (NO_x)

Sulfur oxides

Not combustible.

In the event of decomposition: danger of explosion!

Risk of dust explosion.

Avoid shock and friction.

Ambient fire may liberate hazardous vapours.

5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains

6.3 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 dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage**7.1 Precautions for safe handling****Advice on safe handling**

Work under hood. Do not inhale substance/mixture.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.

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

No metal containers. Tightly closed and away from sources of ignition and heat. Observe national regulations.

MATERIAL SAFETY DATA SHEET (SDS/MSDS)
HYDROXYLAMINE SULPHATE 99% AR

MSDS Number : 0188

Date : February 19th, 2025

Version : 1.0

Storage class

Storage class (TRGS 510): 4.1A: Other explosive hazardous materials

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 control****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**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

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: KCL 741 Dermatril® L

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Material tested: KCL 741 Dermatril® L

Body Protection

protective clothing

Respiratory protection

required when dusts are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type P3

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

MATERIAL SAFETY DATA SHEET (SDS/MSDS)

HYDROXYLAMINE SULPHATE 99% AR



MSDS Number : 0188

Date : February 19th, 2025

Version : 1.0

Control of environmental exposure

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: colorless
Odour	No data available
Odour Threshold	No data available
pH	No data available
Melting point/freezingpoint	Melting point/range: 170 °C - dec.
Initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Density	1,88 g/cm ³ at 20 °C
Water solubility	587 g/l at 20 °C - soluble
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

sensitive to shock The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

Violent reactions possible with: nitrites, nitrates, Powdered metals

Exothermic reaction with: Oxidizing agents, Aldehydes, Ketones

A risk of explosion and/or of toxic gas formation exists with the following substances: bases

10.4 Conditions to avoid

Strong heating (explosive decomposition).

no information available

MATERIAL SAFETY DATA SHEET (SDS/MSDS)

HYDROXYLAMINE SULPHATE 99% AR



MSDS Number : 0188

Date : February 19th, 2025

Version : 1.0

10.5 Incompatible materials

Metals 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 - 842 mg/kg

Remarks: (RTECS)

Symptoms: Irritations, Stomach/intestinal disorders, muscle twitching, Convulsions, Coma

Oral: absorption

Symptoms: Possible damages:, mucosal irritations

LD50 Dermal - Rabbit - male and female - 1.500 - 2.000 mg/kg

(OECD Test Guideline 402)

Symptoms: Allergic reactions

Dermal: absorption

Skin corrosion/irritation

Remarks: Dermatitis

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

Suspected of causing cancer

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

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.

MATERIAL SAFETY DATA SHEET (SDS/MSDS)
HYDROXYLAMINE SULPHATE 99% AR

MSDS Number : 0188

Date : February 19th, 2025

Version : 1.0

RTECS: NC5425000

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea

After absorption:

Allergic reactions, Irritations, Cough, depressed respiration, Drowsiness, Shortness of breath
Stomach/intestinal disorders, muscle twitching, Cyanosis, Convulsions, Coma

The following applies to ammonium salts in general: after swallowing: local irritation symptoms, nausea, vomiting, diarrhoea. Systemic effect: after the uptake of very large quantities: drop in blood pressure, collapse, CNS disorders, spasms, narcotic conditions, respiratory paralysis, haemolysis.

Risk of methaemoglobin formation.

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12: Ecological information**12.1 Toxicity**

Toxicity to fish

LC50 - Pimephales promelas (fathead minnow) - 1 - 10 mg/l - 96 h

Remarks: (External MSDS)

Toxicity to daphnia and other aquatic invertebrates

EC50 - Daphnia magna (Water flea) - 1,62 mg/l - 48 h

Remarks: (External MSDS)

Toxicity to algae

IC50 - Desmodesmus subspicatus (green algae) - 0,86 mg/l - 96 h

Remarks: (External MSDS)

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

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

Discharge into the environment must be avoided.

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.

MATERIAL SAFETY DATA SHEET (SDS/MSDS)
HYDROXYLAMINE SULPHATE 99% AR

MSDS Number : 0188

Date : February 19th, 2025

Version : 1.0

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Product/Packaging disposal**

Dispose of contents/container to hazardous or special waste recommendations collection point, in accordance with local, regional, national and/or international regulation.

Ecology - waste materials :

Hazardous waste due to toxicity.

SECTION 14: Transport information**14.1 UN number**

ADR/RID: 2865

IMDG: 2865

IATA: 2865

14.2 UN proper shipping name

ADR/RID: HYDROXYLAMINE SULPHATE

IMDG: HYDROXYLAMINE SULPHATE

IATA: HYDROXYLAMINE SULPHATE

14.3 Transport hazard class(es)

ADR/RID: 8

IMDG: 8

IATA: 8

14.4 Packaging group

ADR/RID: III

IMDG: III

IATA: III

14.5 Environmental hazards

ADR/RID: yes

IMDG Marine pollutant: yes

IATA: no

14.6 Special precautions for user**Further information**

No data available

SECTION 15: Regulatory information**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.

Authorisations and/or restrictions on use

National legislation

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

E1

ENVIRONMENTAL HAZARDS

Other regulations Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable. Take note of Dir 94/33/EC on the protection of young people at work.

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

MATERIAL SAFETY DATA SHEET (SDS/MSDS)

HYDROXYLAMINE SULPHATE 99% AR



MSDS Number : 0188

Date : February 19th, 2025

Version : 1.0

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

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H302 + H312	Harmful if swallowed or in contact with skin.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May be corrosive to metals.
H319	Harmful if swallowed or in contact with skin.
H351	Causes skin irritation.
H373	May cause an allergic skin reaction.
H400	Causes serious eye irritation.

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

Health: 2

Flammability: 1

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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Revision Date : February 19, 2025