

CHAITANYA CHS, 2nd FLOOR, OFFICE # 206, SIDDHARTH NAGAR, S.V.ROAD, GOREGAON (W), MUMBAI 400062, MH, INDIA.
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MATERIAL SAFETY DATA SHEET (MSDS)

HYDROXYLAMINE SULPHATE LR

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name : HYDROXYLAMINE SULPHATE LR

Product code : H0109805000

Identification of the product : bis(hydroxylammonium) sulphate
 CAS No: 10039-54-0
 EC No :233-118-8
 Annex No :612-123-00-2

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

Use : Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet

Company identification : SUVCHEM
 Chaitanya Tower, 2nd Floor, Office # 206,
 Siddharth Nagar, S.V. Road,
 Goregaon (West), Mumbai - 400062,
 Maharashtra, India.
 Contact: +91 22 28725393 / 94 / 95
 Email ID: info@suvchem.com/care@suvchem.com

1.4. Emergency telephone number

Phone no. : + 91 22 28725393 / 94 / 95 (9:00am - 6:00 pm) [Office hours]

2. Hazards identification -DSD

2.1. Classification of the substance or mixture

Classification EC 67/548 or EC 1999/45

Classification : E; R2
 Carc. Cat. 3; R40
 Xn; R21/22-48/22
 Xi; R36/38
 R43
 N; R50

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Health hazards : Carcinogenicity - Category 2 - Warning (CLP : Carc. 2) H351
 Specific Target Organ Toxicity - Repeated exposure - Category 2 - Warning (CLP : STOT RE 2) H373
 Skin irritation - Category 2 - Warning (CLP : Skin Corr. 2) H315
 Skin sensitisation - Category 1 - Warning (CLP : Skin Sens. 1) H317
 Eye irritation - Category 2A - Warning (CLP : Eye Irrit. 2) H319

MATERIAL SAFETY DATA SHEET (MSDS)
HYDROXYLAMINE SULPHATE LR
2. Hazards identification -DSD (continued)
Physical hazards

Acute toxicity, Oral - Category 4 - Warning (CLP : Acute Tox. 4) H302

Acute toxicity, dermal - Category 4 - Warning (CLP : Acute Tox. 4) H312

Environmental hazards

: Explosives - Division 1.3 - Danger (CLP : Expl. 1.3) H203

: Hazardous to the aquatic environment - Acute hazard - Category 1 - Warning (CLP : Aquatic Acute 1) H400

2.2. Label elements
Labelling EC 67/548 or EC 1999/45
Symbol(s)

Symbol(s)

: E : Explosive.

Xn : Harmful

N : Dangerous for the environment

R Phrase(s)

: R2 : Risk of explosion by shock, friction, fire or other sources of ignition.

R21/22 : Harmful in contact with skin and if swallowed.

R36/38 : Irritating to eyes and skin.

R40 : Limited evidence of a carcinogenic effect.

R43 : May cause sensitization by skin contact.

R48/22 : Harmful : danger of serious damage to health by prolonged exposure if swallowed.

R50 : Very toxic to aquatic organisms.

S Phrase(s)

: S2 : Keep out of the reach of children.

S36/37 : Wear suitable protective clothing and gloves.

S61 : Avoid release to the environment. Refer to special instructions/Safety data sheets.

Contains

: bis(hydroxylammonium) sulphate

Labelling Regulation EC 1272/2008 (CLP)
Hazard pictograms

Signal words

: Danger

Hazard statements

: H203 : Explosive; fire, blast or projection hazard.

H351 : Suspected of causing cancer.

H302 : Harmful if swallowed.

H312 : Harmful in contact with skin.

H319 : Causes serious eye irritation.

H315 : Causes skin irritation.

H317 : May cause an allergic skin reaction.

H373 : May cause damage to organs through prolonged or repeated exposure.

MATERIAL SAFETY DATA SHEET (MSDS)
HYDROXYLAMINE SULPHATE LR
2. Hazards identification -DSD (continued)

	H400 : Very toxic to aquatic life.
Precautionary statements	
• General	: P102: Keep out of reach of children. P103: Read label before use. P101: If medical advice is needed, have product container or label at hand. P201: Obtain special instructions before use.
• Prevention	: P240: Ground/bond container and receiving equipment. P210: Keep away from heat, sparks, open flames or hot surfaces. - No smoking. P280: Wear protective gloves, protective clothing, eye protection, face protection. P260: Do not breathe dust, fume, gas, mist, vapours, spray. P273: Avoid release to the environment. P230: Keep wetted with : (See information supplied by the manufacturer) P250: Do not subject to grinding, shock, ..., friction. P264: Wash thoroughly after handling. P270: Do not eat, drink or smoke when using this product. P272: Contaminated work clothing should not be allowed out of the workplace.
• Response	: P370+P380: In case of fire : Evacuate area. P372: Explosion risk in case of fire. P373: DO NOT fight fire when fire reaches explosives. P302+P352: IF ON SKIN : Wash with plenty of soap and water. P301+P312: IF SWALLOWED : Call a POISON CENTER or doctor if you feel unwell. P308+P313: If exposed or concerned : get medical advice. P391: Collect spillage. P305+P351+P338: IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P333+P313: If skin irritation or rash occurs : Get medical advice. P363: Wash contaminated clothing before reuse. P314: Get medical advice if you feel unwell.
• Storage	: P401: Store in accordance with local, regional, national or international regulation. P405: Store locked up.
• Disposal considerations	: P501: Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Contains	: bis(hydroxylammonium) sulphate

2.3. Other hazards

Other hazards	: The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.
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3. Composition/information on ingredients

Substance / Preparation	: bis(hydroxylammonium) sulphate
	EC No :233-118-8
	Annex No :612-123-00-2
	Substance.

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MATERIAL SAFETY DATA SHEET (MSDS)

HYDROXYLAMINE SULPHATE LR

3. Composition/information on ingredients (continued)

Substance name	Contents	CAS No	EC No	Annex No	REACH Ref.	Classification
bis(hydroxylammonium) sulphate :	100 %	10039-54-0	233-118-8	612-123-00-2	----	E; R2 Carc. Cat. 3; R40 Xn; R21/22-48/22 Xi; R36/38 R43 N; R50 ----- Expl. 1.3 _ H203 Acute Tox. 4 (skin) _ H312 Acute Tox. 4 (oral) _ H302 Carc. 2 _ H351 Eye irrit. 2 _ H319 Skin Irrit. 2 _ H315 Skin Sens. 1 _ H317 STOT RE 2 _ H373 Aquatic Acute 1 _ H400

Contains no other components or impurities which will influence the classification of the product.

4. First aid measures

4.1. Description of first aid measures

Inhalation	: Assure fresh air breathing. Allow the victim to rest.
Skin contact	: Immediately call a POISON CENTER or doctor. Specific treatment (see on this label). Wash with plenty of soap and water. Wash contaminated clothing before reuse. Get medical advice. If skin irritation or rash occurs :
Eye contact	: Get medical advice. If eye irritation persists : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes.
Ingestion	: Obtain emergency medical attention. Call a POISON CENTER or doctor if you feel unwell. Rinse mouth. Do NOT induce vomiting.

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

Symptoms relating to use	: Suspected of causing cancer. Causes damage to organ. Repeated exposure to this material can result in absorption through skin causing significant health hazard. Causes serious eye irritation. Causes skin irritation. May cause an allergic skin reaction. Swallowing a small quantity of this material will result in serious health hazard.
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4.3. Indication of any immediate medical attention and special treatment needed

General information	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
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5. Fire-fighting measures

5.1. Extinguishing media

MATERIAL SAFETY DATA SHEET (MSDS)
HYDROXYLAMINE SULPHATE LR
5. Fire-fighting measures (continued)

- Suitable extinguishing media** : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media : Do not use a heavy water stream.
Surrounding fires : Use water spray or fog for cooling exposed containers.

5.2. Special hazards arising from the substance or mixture

- Flammable class** : Explosive.
Hazardous combustion products : Under fire conditions, hazardous fumes will be present.
 May form flammable/explosive vapour-air mixture.

5.3. Advice for fire-fighters

- Protection against fire** : Do not enter fire area without proper protective equipment, including respiratory protection.
Special procedures : Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment. Evacuate area. DO NOT fight fire when fire reaches explosives.

6. Accidental release measures
6.1. Personal precautions, protective equipment and emergency procedures

- For emergency responders** : Equip cleanup crew with proper protection.
 Ventilate area.
Technical measures : Use special care to avoid static electric charges.
Special precautions : Remove ignition sources. No naked lights. No smoking.
For non-emergency personnel : Evacuate unnecessary personnel.

6.2. Environmental precautions

- Environmental precautions** : Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.
 Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- Clean up methods** : On land, sweep or shovel into suitable containers. Minimize generation of dust.
 Store away from other materials.

6.4. Reference to other sections

See section 8. Exposure controls/personal protection

MATERIAL SAFETY DATA SHEET (MSDS)
HYDROXYLAMINE SULPHATE LR
7. Handling and storage
7.1. Precautions for safe handling

Handling	: Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Avoid breathing dust, fume, gas, mist, vapours, spray. Wash thoroughly after handling. Wash contaminated clothing before reuse. Do not subject to grinding, shock, ..., friction. Obtain special instructions before use.
Technical protective measures	: Provide good ventilation in process area to prevent formation of vapour. Proper grounding procedures to avoid static electricity should be followed.
Special precautions	: Avoid breathing dust, fume, gas, mist, vapours, spray.

7.2. Conditions for safe storage, including any incompatibilities

Storage	: Keep only in the original container in a cool, well ventilated place. Keep container closed when not in use. Store in accordance with local, regional, national or international regulation. Ground/bond container and receiving equipment.
Storage - away from	: Strong bases. Strong acids. Sources of ignition. Direct sunlight. Heat sources.

7.3. Specific end use(s)

Specific end use(s)	: None.
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8. Exposure controls/personal protection
8.1. Exposure controls

Personal protection	: Avoid all unnecessary exposure.
• Respiratory protection	: Wear approved mask.
• Hand protection	: Wear protective gloves.
• Skin protection	: Wear suitable protective clothing.
• Eye protection	: Chemical goggles or safety glasses.
• Others	: When using, do not eat, drink or smoke.

8.2. Control parameters

Occupational Exposure Limits	: No data available.
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9. Physical and chemical properties
9.1. Information on basic physical and chemical properties

Physical state at 20 °C	: Solid.
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MATERIAL SAFETY DATA SHEET (MSDS)
HYDROXYLAMINE SULPHATE LR
9. Physical and chemical properties (continued)

Colour	: White crystalline
Odour	: Odorless
Odour threshold	: No data available.
pH value	: Not applicable.
Melting point [°C]	: 170 °C
Decomposition point [°C]	: N/A
Critical temperature [°C]	: N/A
Auto-ignition temperature [°C]	: N/A
Flammability (solid, gas)	: N/A
Flash point [°C]	: N/A
Boiling point [°C]	: N/A
Initial boiling point [°C]	: N/A
Final boiling point [°C]	: N/A
Evaporation rate	: N/A
Vapour pressure [20°C]	: N/A
Vapour pressure mm/Hg	: N/A
Vapour density	: N/A
Density [g/cm ³]	: 1,9
Relative density, gas (air=1)	: N/A
Relative density, liquid (water=1)	: N/A
Solubility in water [% weight]	: Freely soluble
Solubility in water	: N/A
Log Pow octanol / water at 20°C	: No data available.
Solubility	: 3.6
Viscosity at 40°C [mm ² /s]	: N/A

9.2. Other information

Explosive properties	: Explosive; fire, blast or projection hazard. N/A
Explosion limits - upper [%]	: N/A
Explosion limits - lower [%]	: N/A
Oxidising properties	: No data available.

10. Stability and reactivity
10.1. Reactivity

Reactivity	: Not established.
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MATERIAL SAFETY DATA SHEET (MSDS)
HYDROXYLAMINE SULPHATE LR
10. Stability and reactivity (continued)
10.2. Chemical stability

Chemical stability : Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions : Not established.

10.4. Conditions to avoid

Conditions to avoid : Direct sunlight. Extremely high or low temperatures. Heat. Sparks. Open flame.
Direct sunlight. Overheating.

10.5. Incompatible materials

Materials to avoid : Strong acids. Strong bases.

10.6. Hazardous decomposition products

Hazardous decomposition products : Fumes. Carbon monoxide. Carbon dioxide.

11. Toxicological information
11.1. Information on toxicological effects
Acute toxicity

- Inhalation : Based on available data, the classification criteria are not met.
- Dermal : Harmful in contact with skin.
- Ingestion : Harmful if swallowed.

Corrosion

: Based on available data, the classification criteria are not met.

Irritation

: Causes serious eye irritation.
Causes skin irritation.

Sensitization

: May cause an allergic skin reaction.

Mutagenicity

: Based on available data, the classification criteria are not met.

Carcinogenicity

: Suspected of causing cancer.

Toxic for reproduction

: Based on available data, the classification criteria are not met.

STOT-single exposure

: Based on available data, the classification criteria are not met.

STOT-repeated exposure

: May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

: Based on available data, the classification criteria are not met.

MATERIAL SAFETY DATA SHEET (MSDS)
HYDROXYLAMINE SULPHATE LR
12. Ecological information
12.1. Toxicity

Toxicity information : Very toxic to aquatic life.

12.2. Persistence - degradability

Persistence - degradability : Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential : Not established.

12.4. Mobility in soil

Mobility in soil : Not established.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

12.6. Other adverse effects

Environmental precautions : Avoid release to the environment.

13. Disposal considerations
13.1. Waste treatment methods

General : Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.
 Hazardous waste due to potential risk of explosion.
 Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

14. Transport information
14.1. Land transport (ADR-RID)

Proper shipping name : HYDROXYLAMINE SULPHATE
UN N° : 2865
H.I. nr : 80
ADR - Class : 8

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MATERIAL SAFETY DATA SHEET (MSDS)
HYDROXYLAMINE SULPHATE LR
14. Transport information (continued)

Labelling - Transport : 8 : Corrosive substance.



ADR - Classification code : C2
 ADR - Group : III
 ADR - Packing instructions : P002 R001 LP002
 ADR - Limited Quantity : 5 KG
 ADR - Tunnel code



: E : Passage forbidden through tunnels of category E.

14.2. Sea transport (IMDG). [English only]

Proper shipping name : HYDROXYLAMINE SULPHATE
 UN N° : 2865
 IMO-IMDG - Class or division : 8 : Corrosive substance.
 IMO-IMDG - Packing group : III
 IMO-IMDG - Packing instructions : P002 LP02
 IMO-IMDG - Limited quantities : 5 kg
 IMO-IMDG - Marine pollution : Yes
 EMS-Nr : F-A S-B

14.3. Air transport (ICAO-IATA). [English only]

Proper shipping name : HYDROXYLAMINE SULPHATE
 UN N° : 2865
 IATA - Class or division : 8 : Corrosive substance.
 IATA - Packing group : III
 IATA - Passenger and Cargo Aircraft : ALLOWED
 - Passenger and Cargo - Packing : 860
 instruction
 - Passenger and Cargo - Maximum : 25 kg
 Quantity/Packing
 IATA - Cargo only : ALLOWED
 - Cargo only - Packing instruction : 864
 - Cargo only - Maximum Quantity/ : 100 kg
 Packing

MATERIAL SAFETY DATA SHEET (MSDS)
HYDROXYLAMINE SULPHATE LR
14. Transport information (continued)

IATA - Limited Quantities : 5 kg
 ERG-Nr : 8L

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

Safety, health and environmental regulations/legislation specific for the substance or mixture : Ensure all national/local regulations are observed.
 REACH Restrictions - Annex XVII : The components of this product are not subject to restrictions.
 REACH Authorisation - Annex XIV : The components of this product are not subject to authorization.

15.2. Chemical Safety Assessment

Chemical Safety Assessment : It has not been carried out.

16. Other information

Revision : Revision - See : *

Abbreviations and acronyms : PBT: persistent, bioaccumulative and toxic.
 vPvB: very persistent and very bioaccumulative

Sources of key data used : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

List of relevant R phrases (heading 3) : R2 : Risk of explosion by shock, friction, fire or other sources of ignition.
 R21/22 : Harmful in contact with skin and if swallowed.
 R36/38 : Irritating to eyes and skin.
 R40 : Limited evidence of a carcinogenic effect.
 R43 : May cause sensitization by skin contact.
 R48/22 : Harmful : danger of serious damage to health by prolonged exposure if swallowed.
 R50 : Very toxic to aquatic organisms.

List of full text of H-statements in section 3 : H203 : Explosive; fire, blast or projection hazard.
 H302 : Harmful if swallowed.
 H312 : Harmful 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.
 H373 : May cause damage to organs through prolonged or repeated exposure.
 H400 : Very toxic to aquatic life.

Further information : None.

MATERIAL SAFETY DATA SHEET (MSDS)

HYDROXYLAMINE SULPHATE LR

In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008

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