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TECHNO PHARMCHEM
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HYDROXYLAMINE HYDROCHLORIDE
MATERIAL SAFETY DATA SHEET

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product form	:	Substance
CAS No	:	5470-11-1
Product code	:	38264, A-38264

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

1.2.1. Relevant identified uses

Industrial/professional use spec	:	Industrial
For professional use only		
Use of the substance/mixture	:	Laboratory Reagent

1.2.2. Uses advised against

No additional information available

1.3. Details of the manufacturer of the safety data sheet

Techno Pharmchem
Plot No.1022, Modern Industrial Estate,
Bahadurgarh-124507, India
T +91 11 23646422
info@technopharmchem.com

1.4. Emergency telephone number

Emergency number: +91 11 23646422 (9:30am – 5.30pm)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to regulation (EC) No. 1272/2008[CLP]

Corrosive to metals, Category 1	H290
Acute toxicity (oral), Category 4	H302
Acute toxicity (dermal), Category 4	H312
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Skin sensitisation, Category 1	H317
Carcinogenicity, Category 2	H351
Specific target organ toxicity — Repeated exposure, Category 2	H373
Hazardous to the aquatic environment — Acute Hazard, Category 1	H400

Full text of H-statements: see section 16

Adverse physicochemical, human health and environmental effects
May be corrosive to metals. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure. Harmful in contact with skin. Harmful if swallowed. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Very toxic to aquatic life.

2.2. Label elements

Labeling according to regulation (EC) No. 1272/2008 [CLP]

Signal word (CLP)	:	Warning
Hazard statements (CLP)	:	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. H373 - May cause damage to organs through prolonged or repeated exposure. H400 - Very toxic to aquatic life.
Precautionary statements (CLP)	:	P273 - Avoid release to the environment. P280 - Wear eye protection, protective clothing, protective gloves, protective clothing, eye protection, face protection. P301+P312 - IF SWALLOWED: Call a doctor if you feel unwell. P302+P352 - IF ON SKIN: Wash with plenty of water. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 - If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

No additional information available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Name	:	HYDROXYLAMINE HYDROCHLORIDE
CAS-No.	:	5470-11-1

Full text of R- and H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

First – aid measures general : IF exposed or concerned: Get medical advice/attention. Call a doctor if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If you feel unwell, seek medical advice.

First-aid measures after skin contact : Immediately call a doctor. Specific measures. Wash with plenty of water/... Wash contaminated clothing before reuse. Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention

First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Call a doctor if you feel unwell. Call a doctor if you feel unwell

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

Symptoms/effects after skin contact : Repeated exposure to this material can result in absorption through skin causing significant health hazard. Harmful in contact with skin. Irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Eye irritation.

Symptoms/effects after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

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

Treat symptomatically

SECTION 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Water spray. Dry powder. Foam.

Unsuitable extinguishing media : dry chemical powder. Foam. Carbon dioxide (CO2). Water.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products : Toxic fumes may be released in case of fire

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedure

6.1.1. For non-emergency personnel

Emergency procedures	:	Ventilate spillage area. Evacuate unnecessary personnel. Do not breathe dust, fume, gas, mist, spray, vapours. Avoid contact with skin, eyes and clothing

6.1.2. For emergency responders

Protective equipment	:	Do not attempt to take action without suitable protective equipment. Use personal protective equipment as required.
Emergency procedures	:	Stop release

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment	:	Collect spillage.
Methods for cleaning up	:	Mechanically recover the product. Clear up rapidly by scoop or vacuum. Notify authorities if product enters sewers or public waters.
Other information	:	Dispose of materials or solid residues at an authorized site

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Precautions for safe handling	:	Do not get in eyes. on skin, or on clothing.
Hygiene measures	:	Do not eat, drink or smoke when using this product. Wash… thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	:	Store in original container. Keep container tightly closed. Store in a dry place. Protect from moisture.

7.3. Specific end use(s)

No additional information available

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

No additional information available

8.2. Exposure controls

Hand protection	:	Protective gloves
Eye protection	:	Chemical goggles or safety glasses
Skin and body protection	:	Wear suitable protective clothing
Respiratory protection	:	[In case of inadequate ventilation] Wear respiratory protection.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	:	Solid
Appearance	:	Crystalline powder.
Molecular mass	:	69.49 g/mol
Colour	:	White. Colourless.
Odour	:	Odourless.
Odour threshold	:	No data available
pH	:	2.5 – 3.5 (5% aqueous solution)
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	155 – 157 °C
Freezing point	:	Not applicable
Boiling point	:	305.6 °C
Flash point	:	Not applicable
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Non-flammable.
Vapour pressure	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	No data available
Density	:	1.67 g/cm³
Solubility	:	Water: 95 g/100ml - Soluble in water
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Viscosity, kinematic	:	Not applicable
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	No data available
Explosive limits	:	Not applicable

9.2. Other information

No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical Stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid
Direct sunlight. Air contact. Moisture.

10.5. Incompatible materials
metals.

10.6. Hazardous decomposition products
No additional information available

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity(oral)	:	Harmful if swallowed.
Acute toxicity (dermal)	:	Harmful in contact with skin.
Acute toxicity (inhalation)	:	Not classified
Skin corrosion/irritation	:	Causes skin irritation. pH: 2.5 – 3.5 (5% aqueous solution)
Serious eye damage/irritation	:	Causes serious eye irritation. pH: 2.5 – 3.5 (5% aqueous solution)
Respiratory or skin sensitisation	:	May cause an allergic skin reaction.
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Suspected of causing cancer.
Reproductive toxicity	:	Not classified
STOT-single exposure	:	Not classified
STOT-repeated exposure	:	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	:	Not classified
Potential adverse human health effects and symptoms	:	Harmful if swallowed, Harmful in contact with skin.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - general	:	Very toxic to aquatic life.
Ecology - water	:	Very toxic to aquatic life.
Hazardous to the aquatic environment, short-term (acute)	:	Very toxic to aquatic life.
Hazardous to the aquatic environment, long-term (chronic)	:	Not classified

12.2. Persistence and degradability
No additional information available

12.3. Bio accumulative potential
No additional information available

12.4. Mobility in soil
No additional information available

12.5. Results of PBT AND vPvB assessment
No additional information available

12.6. Other adverse effects
No additional information available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods
Product/packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number
ADR/RID: - 2923 IMDG: - 2923 IATA: - 2923

14.2 UN Proper shipping name
ADR/RID : HYDROXYLAMINE HYDROCHLORIDE
IMDG : HYDROXYLAMINE HYDROCHLORIDE
IATA : Hydroxylamine Hydrochloride

14.3 Transport Hazard class(es)
ADR/RID: - 8 (6.1) IMDG: - 8 (6.1) IATA: - 8 (6.1)

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
No data available

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Ensure all local, regional, national and/or international regulations are observed.

15.2 Chemical safety Assessment
For this product a chemical safety assessment was not carried out.

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Website : www.technopharmchem.com

SECTION 16: OTHER INFORMATION.

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

Eye Irrit.	Eye irritation
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 cause an allergic skin reaction.
H319	Causes serious eye irritation.

The information contained herein in good faith but makes no representations as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. We do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.