CAS-No.: MSDS



MATERIAL SAFETY DATA SHEET (MSDS)

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

1.1. Product identifier

Product form : Mixture

.

Product code : B-01112

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

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Bio-Chem Chemicals 5455, Nicholson Road Science Market, Ambala Cantt. 133001 Haryana (India)

+91-82952 41953

info@biofinechemical.com - www.biofinechemical.com

1.4. Emergency telephone number

Emergency number : +91 99921 51495 (10.00am - 06.30pm) (Office Hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Skin corrosion/irritation, H315

Category 2

Serious eye damage/eye H319

irritation, Category 2

Specific target organ H335

toxicity — Single exposure, Category 3, Respiratory tract irritation

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

Safety Data Sheet

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS07

Signal word (CLP) : Warning

Hazard statements (CLP) : H315 - Causes skin irritation.

H319 - Causes serious eye irritation. H335 - May cause respiratory irritation.

Precautionary statements (CLP) : P261 - Avoid breathing vapours, spray, dust, fume, gas.

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

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

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Water	(CAS-No.) 7732-18-5 (EC-No.) 231-791-2	75 - 99	Not classified
Hydrochloric acid	(CAS-No.) 7647-01-0 (EC-No.) 231-595-7 (EC Index-No.) 017-002-01-X	15 - 25	Skin Corr. 1B, H314 STOT SE 3, H335
Sulfamic acid	(CAS-No.) 5329-14-6 (EC-No.) 226-218-8 (EC Index-No.) 016-026-00-0	1 - 5	Eye Irrit. 2, H319 Skin Irrit. 2, H315 Aquatic Chronic 3, H412

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Immediately call a

POISON CENTER/doctor. Call a POISON CENTER/doctor if you feel unwell.

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First-aid measures after skin contact : Take off immediately all contaminated clothing. Rinse skin with water/shower.

Immediately call a POISON CENTER/doctor.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor.

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

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : Causes skin irritation.

Symptoms/effects after eye contact : Causes serious eye irritation.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory

protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Collect spillage. On land, sweep or shovel into suitable containers.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not breathe vapours. Avoid contact with skin and eyes. Use only outdoors or in a

well-ventilated area. Provide good ventilation in process area to prevent formation of

vapour.

Hygiene measures : Wash contaminated clothing before reuse. Wash hands and other exposed areas

with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.

Storage conditions : Keep container tightly closed. Store in a well-ventilated place.

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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 face shield
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 : Liquid

Colour : Clear Colorless.

Odour : No data available

Odour threshold : No data available

pH : No data available

Relative evaporation rate (butylacetate=1) : No data available

Melting point : No data available

Freezing point : No data available

Boiling point : 176 °C

Flash point : 164 °C

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapour pressure : No data available

Relative vapour density at 20 °C : No data available

Relative density : No data available

Solubility : Water: Miscible in water

Log Pow : No data available

Viscosity, kinematic : No data available

Viscosity, dynamic : No data available

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Explosive properties : No data available

Oxidising properties : No data available

Explosive limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Air contact. Direct sunlight.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Thermal decomposition generates: Corrosive vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : May cause respiratory irritation.

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

Safety Data Sheet

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative 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

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : 1789 UN-No. (IMDG) : 1789 UN-No. (IATA) : 1789 UN-No. (ADN) : 1789 UN-No. (RID) : 1789

14.2. UN proper shipping name

Proper Shipping Name (ADR) : HYDROCHLORIC ACID
Proper Shipping Name (IMDG) : HYDROCHLORIC ACID
Proper Shipping Name (IATA) : Hydrochloric acid

Proper Shipping Name (ADN) : HYDROCHLORIC ACID

Proper Shipping Name (RID) : HYDROCHLORIC ACID

Transport document description (ADR) : UN 1789 HYDROCHLORIC ACID, 8, II, (E)
Transport document description (IMDG) : UN 1789 HYDROCHLORIC ACID, 8, II
Transport document description (IATA) : UN 1789 Hydrochloric acid, 8, II

Transport document description (ADN) : UN 1789 HYDROCHLORIC ACID, 8, II
Transport document description (RID) : UN 1789 HYDROCHLORIC ACID, 8, II

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 8

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Danger labels (ADR) : 8

IMDG

Transport hazard class(es) (IMDG) : 8
Danger labels (IMDG) : 8



IATA

Transport hazard class(es) (IATA) : 8
Hazard labels (IATA) : 8



ADN

Transport hazard class(es) (ADN) : 8
Danger labels (ADN) : 8



RID

Transport hazard class(es) (RID) : 8
Danger labels (RID) : 8



14.4. Packing group

Packing group (ADR) : II
Packing group (IMDG) : II
Packing group (IATA) : II
Packing group (ADN) : II
Packing group (RID) : II

14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

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Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : C1
Special provisions (ADR) : 520
Limited quantities (ADR) : 11
Excepted quantities (ADR) : E2

Packing instructions (ADR) : P001, IBC02

Mixed packing provisions (ADR) : MP15
Portable tank and bulk container : T8

instructions (ADR)

Portable tank and bulk container special

provisions (ADR)

Tank code (ADR) : L4BN
Vehicle for tank carriage : AT
Transport category (ADR) : 2
Hazard identification number (Kemler No.) : 80

Orange plates

80 1789

: TP2

Tunnel restriction code (ADR) : E EAC code : 2R

- Transport by sea

: P001 Packing instructions (IMDG) IBC packing instructions (IMDG) : IBC02 IBC special provisions (IMDG) : B20 : T8 Tank instructions (IMDG) Tank special provisions (IMDG) : TP2 EmS-No. (Fire) : F-A : S-B EmS-No. (Spillage) : C Stowage category (IMDG)

Properties and observations (IMDG) : Colourless liquid.An aqueous solution of the gas hydrogen chloride. Highly corrosive

to most metals. Causes burns to skin, eyes and mucous membranes.

MFAG-No : 157

- Air transport

PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y840
PCA limited quantity max net quantity : 0.5L

(IATA)

PCA packing instructions (IATA) : 851
PCA max net quantity (IATA) : 1L
CAO packing instructions (IATA) : 855
CAO max net quantity (IATA) : 30L
Special provisions (IATA) : A3
ERG code (IATA) : 8L

- Inland waterway transport

Classification code (ADN) : C1
Special provisions (ADN) : 520
Limited quantities (ADN) : 1 L
Excepted quantities (ADN) : E2

Safety Data Sheet

Carriage permitted (ADN) : T
Equipment required (ADN) : PP, EP
Number of blue cones/lights (ADN) : 0

- Rail transport

Classification code (RID) : C1
Special provisions (RID) : 520
Limited quantities (RID) : 1L
Excepted quantities (RID) : E2

Packing instructions (RID) : P001, IBC02

Mixed packing provisions (RID) : MP15
Portable tank and bulk container : T8

instructions (RID)

Portable tank and bulk container special

provisions (RID)

: TP2

Tank codes for RID tanks (RID) : L4BN
Transport category (RID) : 2
Colis express (express parcels) (RID) : CE6
Hazard identification number (RID) : 80

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

Germany

Reference to AwSV : Water hazard class (WGK) 3, severe hazard to water (Classification according to

AwSV, Annex 1)

12th Ordinance Implementing the Federal

Immission Control Act - 12.BImSchV

: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen
SZW-lijst van mutagene stoffen
NIET-limitatieve lijst van voor de
voortplanting giftige stoffen – Borstvoeding

None of the components are listed
None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen –

: None of the components are listed

Vruchtbaarheid

NIET-limitatieve lijst van voor de

voortplanting giftige stoffen - Ontwikkeling

: None of the components are listed

Safety Data Sheet

Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:

Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3		
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2		
Skin Corr. 1B	Skin corrosion/irritation, Category 1B		
Skin Irrit. 2	Skin corrosion/irritation, Category 2		
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation		
H314	Causes severe skin burns and eye damage.		
H315	Causes skin irritation.		
H319	Causes serious eye irritation.		
H335	May cause respiratory irritation.		
H412	Harmful to aquatic life with long lasting effects.		

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product