Pyridoxine hydrochloride

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 03/04/2023 Revision date: 03/12/2024 Supersedes version of: 03/04/2023 Version: 2.0

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

1.1. Product identifier

Product form	:	Substance
Substance name	:	Pyridoxine hydrochloride
Chemical name	:	Pyridoxine hydrochloride
EC-No.	:	200-386-2
CAS-No.	:	58-56-0
Product code	:	201600777

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

Relevant identified uses

Use of the substance/mixture	:	Scientific research and development Technical testing and analysis For professional use only
Function or use category	:	Laboratory chemicals

Uses advised against

Restrictions on use	:	Not for food, drug or home use

1.3. Details of the supplier of the safety data sheet

European Directorate for the Quality of Medicines & Healthcare
EDQM, Council of Europe
7, Allée Kastner, CS30026
F 67081 Strasbourg
France
T +33(0)388412035, F +33(0)388412771
sds@edqm.eu, www.edqm.eu

1.4. Emergency telephone number

Emergency number	:	+33(0)390215608

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Serious eye damage/eye irritation, Category 1 H318
Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Causes serious eye damage.

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS05

Signal word (CLP)	:	Danger
Hazard statements (CLP)	:	H318 - Causes serious eye damage.
Precautionary statements (CLP)	:	P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing 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.
P310 - Immediately call a POISON CENTER or doctor.

Labelling according to: Exemption for inner packaging where the contents do not exceed 10ml.

Hazard pictograms (CLP) :

GHS05

2.3. Other hazards

Other information : Active substance (in pharmaceutical products).
Warning - substance not yet tested completely.

SECTION 3: Composition/information on ingredients

3.1. Substances

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Pyridoxine hydrochloride	CAS-No.: 58-56-0 EC-No.: 200-386-2	≤ 100	Eye Dam. 1, H318

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : In all cases of doubt, or when symptoms persist, seek medical attention.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Allow the victim to rest. If the person feels unwell : Get medical advice/attention.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

First-aid measures after eye contact : Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Remove contact lenses, if present and easy to do. Continue rinsing. Consult an eye specialist immediately.

First-aid measures after ingestion : Rinse mouth out with water (only if the person is conscious). Never give anything by mouth to an unconscious person. Get immediate medical advice/attention.

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

Symptoms/effects after eye contact : Causes serious eye damage. Redness, pain.

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 : Use extinguishing media appropriate for surrounding fire. Carbon dioxide. Water spray. Dry powder. Extinguishing blanket.

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

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases. Toxic fumes may be released.

5.3. Advice for firefighters

Firefighting instructions : Prevent fire fighting water from entering the environment.
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 procedures

General measures : Avoid contact with skin, eyes and clothing.

For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Absorb with an inert material and place in an appropriate waste disposal container.
Methods for cleaning up : Clean contaminated surfaces with an excess of water. Clean with the help of detergents.

6.4. Reference to other sections

See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid all unnecessary exposure. Ensure good ventilation of the work station.
Hygiene measures : Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wash hands before work breaks and after finishing work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep container tightly closed. Keep away from heat and direct sunlight.
Packaging materials : Keep in original containers.

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

Appropriate engineering controls

Appropriate engineering controls:
Ensure good ventilation of the work station. Both local exhaust and general room ventilation are usually required. Material should be handled in a laboratory hood whenever possible.

Personal protection equipment

Eye and face protection

Eye protection:
Wear eye protection. Safety glasses with side shields. (EN 166)

Skin protection

Skin and body protection:
Wear suitable protective clothing. Laboratory use : Lab coat. (EN 13034)

Hand protection:
Wear suitable gloves. Chemically resistant protective gloves. (EN 374)

Respiratory protection

Respiratory protection:
In case of dust formation use respirator with filter: P3

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Solid
Colour	:	white. almost white.
Appearance	:	Crystalline powder.
Molecular mass	:	205.64 g/mol
Odour	:	Not available
Odour threshold	:	Not available
Melting point	:	≈ 205 °C
Freezing point	:	Not available
Boiling point	:	Not available
Flammability	:	Not available
Lower explosion limit	:	Not applicable
Upper explosion limit	:	Not applicable
Flash point	:	Not applicable
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	Not available
pH	:	Not available
pH solution	:	2.4 – 3 (5% Aqueous solution)
Viscosity, kinematic	:	Not applicable
Solubility	:	Water: 100 – 1000 g/l
Partition coefficient n-octanol/water (Log Kow)	:	≈ -0.7
Vapour pressure	:	Not available
Vapour pressure at 50°C	:	Not available
Density	:	Not available
Relative density	:	Not available
Relative vapour density at 20°C	:	Not applicable
Particle size	:	Not 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

No additional information available

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified (Based on available data, the classification criteria are not met; Lack of data)
Acute toxicity (dermal) : Not classified (Lack of data)
Acute toxicity (inhalation) : Not classified (Lack of data)

Pyridoxine hydrochloride (58-56-0)	
LD50 oral rat	> 2000 mg/kg

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)
Serious eye damage/irritation : Causes serious eye damage.
Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity : Not classified (Lack of data)
Reproductive toxicity : Not classified (Lack of data)
STOT-single exposure : Not classified (Lack of data)
STOT-repeated exposure : Not classified (Lack of data)
Aspiration hazard : Not classified (Lack of data)

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short–term (acute) : Not classified (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long–term (chronic) : Not classified (Based on available data, the classification criteria are not met)

Pyridoxine hydrochloride (58-56-0)	
LC50 - Fish [1]	> 100 mg/l (96 Hours, Rainbow trout) (OECD 203 method)
EC50 - Crustacea [1]	> 100 mg/l (48 Hours, Daphnia magna (Water flea)) (OECD 202 method)
ErC50 algae	72 mg/l (72 Hours, Scenedesmus subspicatus) (OECD 201 method)

12.2. Persistence and degradability

Pyridoxine hydrochloride (58-56-0)	
Persistence and degradability	Rapidly degradable

12.3. Bioaccumulative potential

Pyridoxine hydrochloride (58-56-0)	
Partition coefficient n-octanol/water (Log Kow)	≈ -0.7

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

No additional information available

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA

ADR	IMDG	IATA
14.1. UN number or ID number		
Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name		
Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)		
Not applicable	Not applicable	Not applicable
14.4. Packing group		
Not applicable	Not applicable	Not applicable
14.5. Environmental hazards		
Not applicable	Not applicable	Not applicable
No supplementary information available		

14.6. Special precautions for user

Overland transport
Not applicable

Transport by sea
Not applicable

Air transport
Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU-Regulations

REACH Annex XVII (Restriction List)

Not listed on REACH Annex XVII

REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

Council Regulation (EC) for the control of dual-use items

Not listed on the COUNCIL REGULATION (EC) of dual-use items.

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Indication of changes

Section	Changed item	Comments
	Supersedes version of	**Added**
	Revision date	**Added**
1.1	CAS-No.	**Added**
1.1	EC-No.	**Added**
1.1	Name	**Modified**
1.2	Main use category	**Removed**
1.2	Use of the substance/mixture	**Modified**
1.2	Restrictions on use	**Modified**
2.1	Adverse physicochemical, human health and environmental effects	**Modified**
2.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	**Added**
2.2	Precautionary statements (CLP)	**Added**
2.2	Hazard statements (CLP)	**Added**

Indication of changes		
Section	**Changed item**	**Comments**
2.2	Signal word (CLP)	**Added**
2.2	Hazard pictograms (CLP)	**Added**
2.3	Other information	**Added**
4.1	First-aid measures after eye contact	**Modified**
4.1	First-aid measures after skin contact	**Modified**
4.1	First-aid measures after inhalation	**Added**
4.1	First-aid measures after ingestion	**Added**
4.1	First-aid measures general	**Added**
4.2	Symptoms/effects after eye contact	**Added**
5.1	Suitable extinguishing media	**Modified**
5.1	Unsuitable extinguishing media	**Added**
5.2	Fire hazard	**Removed**
5.2	Hazardous decomposition products in case of fire	**Added**
5.3	Firefighting instructions	**Modified**
5.3	Protection during firefighting	**Added**
6.1	General measures	**Added**
6.1	Protective equipment	**Added**
6.1	Emergency procedures	**Modified**
6.2	Environmental precautions	**Added**
6.3	Methods for cleaning up	**Added**
6.3	For containment	**Added**
6.4	Reference to other sections (8, 13)	**Added**
7.1	Hygiene measures	**Added**
7.1	Precautions for safe handling	**Added**
7.2	Storage conditions	**Added**
7.2	Packaging materials	**Added**
7.3	Specific end uses	**Removed**
8.2	Skin and body protection	**Modified**
8.2	Appropriate engineering controls	**Modified**
8.2	Hand protection	**Modified**
8.2	Eye protection	**Added**
8.2	Respiratory protection	**Added**
9	Partition coefficient n-octanol/water (Log Kow)	**Added**
9	pH solution	**Added**
9	Appearance	**Modified**
9	Colour	**Added**
9	Melting point	**Added**

Indication of changes		
Section	**Changed item**	**Comments**
9	Molecular mass	**Added**
10.1	Reactivity	**Removed**
10.3	Possibility of hazardous reactions	**Removed**
10.5	Incompatible materials	**Removed**
10.6	Hazardous decomposition products	**Removed**
12.1	LC50 - Fish [1]	**Added**
12.1	EC50 - Crustacea [1]	**Added**
12.1	ErC50 algae	**Added**

Full text of H- and EUH-statements:	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
H318	Causes serious eye damage.

Safety Data Sheet (SDS), EU

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