

# **SAFETY DATA SHEET**

Version 6.6 Revision Date 10/07/2021 Print Date 01/15/2022

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

#### **1.1 Product identifiers**

	Product name	:	L-Histidine monohydrochloride monohydrate
	Product Number Brand CAS-No.	:	H8125 Sigma 5934-29-2
1.2	Relevant identified uses of the substance or mixture and uses advised against		
	Identified uses	:	Laboratory chemicals, Synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

	Company	:	Sigma-Aldrich Inc. 3050 SPRUCE ST ST. LOUIS MO 63103 UNITED STATES
	Telephone Fax	-	+1 314 771-5765 +1 800 325-5052
1.4	Emergency telephone		

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

### **SECTION 2: Hazards identification**

# 2.1 Classification of the substance or mixture GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Eye irritation (Category 2A), H319

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

#### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word	Warning
Hazard statement(s) H319	Causes serious eye irritation.
Precautionary statement(s) P264 Sigma - H8125	Wash skin thoroughly after handling.

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P280 P305 + P351 + P338	Wear eye protection/ face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue
P337 + P313	rinsing. If eye irritation persists: Get medical advice/ attention.
	I eye initiation persists. Get metical advice/ attention.

# 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

ECTION 3: Composition/information on ingredients						
1	<b>Substances</b> Synonyms	:	<ul> <li>L-α-Amino-β-(4-imidazolyl)propionic acidmonohydrochloride</li> <li>4-Hydroxy-2-methyl-1,1-dioxo-N-(pyridin-2-yl)-1,2-dihydro-1lamb</li> <li>da6,2-benzothiazine-3-carboxamide</li> </ul>			
	Formula Molecular weight CAS-No.	:	C <sub>6</sub> H <sub>9</sub> N <sub>3</sub> O <sub>2</sub> · HCl · H <sub>2</sub> O 209.63 g/mol 5934-29-2			
	Component		Cla	assification	Concentration	
L-(-)-histidine monohydrochloride monohydrate						
			Ey	e Irrit. 2A; H319	<= 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.

#### In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

#### 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

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# SECTION 5: Firefighting measures

### 5.1 Extinguishing media

# Suitable extinguishing media

Water Foam Carbon dioxide (CO2) Dry powder

### Unsuitable extinguishing media

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

# 5.2 Special hazards arising from the substance or mixture

Carbon oxides Nitrogen oxides (NOx) Hydrogen chloride gas Combustible. Development of hazardous combustion gases or vapours possible in the event of fire.

### 5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.

### 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** For precautions see section 2.2.

# 7.2 Conditions for safe storage, including any incompatibilities

# Storage conditions

Tightly closed. Dry.

# Storage class

Storage class (TRGS 510): 11: Combustible Solids

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# 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

Contains no substances with occupational exposure limit values.

#### 8.2 Exposure controls

#### Appropriate engineering controls

Change contaminated clothing. Wash hands after working with substance.

#### **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**

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

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.

#### **Control of environmental exposure**

Do not let product enter drains.

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# SECTION 9: Physical and chemical properties

# 9.1 Information on basic physical and chemical properties

	•		
a)	Appearance	Form: crystalline Color: white	
b)	Odor	weak characteristic odour	
c)	Odor Threshold	No data available	
d)	рН	4.38 - 4.48 at 149.55 g/l at 20 °C (68 °F)	
e)	Melting point/freezing point	Melting point/range: 254 °C (489 °F) - dec.	
f)	Initial boiling point and boiling range	Decomposes below the boiling point.	
g)	Flash point	()Not applicable	
h)	Evaporation rate	No data available	
i)	Flammability (solid, gas)	No data available	
j)	Upper/lower flammability or explosive limits	No data available	
k)	Vapor pressure	< 0.1 hPa at 20 °C (68 °F) - OECD Test Guideline 104	
I)	Vapor density	No data available	
m)	Density	1.4723 g/cm3 at 20 °C (68 °F) - OECD Test Guideline 109	
	Relative density	No data available	
n)	Water solubility	149.55 g/l at 20 °C (68 °F) - OECD Test Guideline 105	
o)	Partition coefficient: n-octanol/water	No data available	
p)	Autoignition temperature	> 268 °C (> 514 °F) at 1,013 hPa - Relative self-ignition temperature for solidsdoes not ignite	
q)	Decomposition temperature	> 268 °C (> 514 °F) -	
r)	Viscosity	No data available	
s)	Explosive properties	No data available	
t)	Oxidizing properties	none	
Other safety information			

**9.2 Other safety information** No data available

# SECTION 10: Stability and reactivity

#### **10.1 Reactivity**

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.

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### **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: Strong oxidizing agents

- **10.4 Conditions to avoid** no information available
- **10.5 Incompatible materials** No data available
- **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 - female - > 2,000 mg/kg (OECD Test Guideline 423) Inhalation: No data available Dermal: No data available No data available

#### Skin corrosion/irritation

No data available

#### Serious eye damage/eye irritation

Eyes - Human Result: Eye irritation (OECD Test Guideline 492) Remarks: (ECHA)

# Respiratory or skin sensitization

No data available

#### **Germ cell mutagenicity** No data available

#### Carcinogenicity

- IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

#### **Reproductive toxicity**

No data available

# Specific target organ toxicity - single exposure

No data available

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# Specific target organ toxicity - repeated exposure

No data available

# Aspiration hazard

No data available

# **11.2 Additional Information**

### RTECS: MS3119000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

# **SECTION 12: Ecological information**

#### **12.1 Toxicity** No data available

- 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 PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
- **12.6 Endocrine disrupting properties** No data available
- **12.7** Other adverse effects

No data available

# SECTION 13: Disposal considerations

# **13.1 Waste treatment methods**

#### Product

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

# SECTION 14: Transport information DOT (US)

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The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada



Not dangerous goods

#### IMDG

Not dangerous goods

# ΙΑΤΑ

Not dangerous goods

#### **Further information**

Not classified as dangerous in the meaning of transport regulations.

#### **SECTION 15: Regulatory information**

#### SARA 302 Components

This material does not contain any components with a section 302 EHS TPQ.

#### SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### SARA 311/312 Hazards

No SARA Hazards

#### **Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

#### **SECTION 16: Other information**

#### **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. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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