

according to Regulation UK SI 2019/758 and UK SI 2020/1577 as amended

Creation Date 20-Dec-2007

Revision Date 21-Sep-2023

Revision Number 6

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

# 1.1. Product identifier

Product Description:	Histamine dihydrochloride
Cat No. :	150620000; 150620050; 150620250; 150621000
Synonyms	Histamine dichloride
CAS No	56-92-8
EC No	200-298-4
Molecular Formula	C5 H9 N3 . 2 H Cl

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

Recommended Use	Laboratory chemicals.
Uses advised against	No Information available

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

Company

**UK entity/business name** Fisher Scientific UK Bishop Meadow Road, Loughborough, Leicestershire LE11 5RG, United Kingdom

#### EU entity/business name Thermo Fisher Scientific

Janssen Pharmaceuticalaan 3a, 2440 Geel, Belgium

E-mail address

begel.sdsdesk@thermofisher.com

1.4. Emergency telephone number

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11 Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

# **SECTION 2: HAZARDS IDENTIFICATION**

# 2.1. Classification of the substance or mixture

CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

# Physical hazards

Based on available data, the classification criteria are not met

# Health hazards

### Histamine dihydrochloride

Skin Corrosion/Irritation Serious Eye Damage/Eye Irritation Respiratory Sensitization Skin Sensitization Specific target organ toxicity - (single exposure)

## **Environmental hazards**

Based on available data, the classification criteria are not met

Full text of Hazard Statements: see section 16

2.2. Label elements



# Signal Word

Danger

## **Hazard Statements**

- H315 Causes skin irritation
- H317 May cause an allergic skin reaction
- H319 Causes serious eye irritation
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
- H335 May cause respiratory irritation

# **Precautionary Statements**

- P302 + P352 IF ON SKIN: Wash with plenty of soap and water
- P333 + P313 If skin irritation or rash occurs: Get medical advice/attention
- P337 + P313 If eye irritation persists: Get medical advice/attention
- P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing
- P312 Call a POISON CENTER or doctor if you feel unwell
- P280 Wear protective gloves/protective clothing/eye protection/face protection

# 2.3. Other hazards

This product does not contain any known or suspected endocrine disruptors

# **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

# 3.1. Substances

Component	CAS No	EC No	Weight %	CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567
1H-Imidazole-4-ethanamine, dihydrochloride	56-92-8	EEC No. 200-298-4	>95	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Resp. Sens. 1 (H334) Skin Sens. 1 (H317)

Category 2 (H315) Category 2 (H319) Category 1 (H334) Category 1 (H317) Category 3 (H335) Full text of Hazard Statements: see section 16

# **SECTION 4: FIRST AID MEASURES**

## 4.1. Description of first aid measures

General Advice	If symptoms persist, call a physician.	
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.	
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.	
Ingestion	Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.	
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.	
Self-Protection of the First Aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.	
4.2 Most important symptoms and effects, both south and delayed		

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

May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause allergic skin reaction. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

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

Notes to Physician

Treat symptomatically.

# **SECTION 5: FIREFIGHTING MEASURES**

# 5.1. Extinguishing media

# Suitable Extinguishing Media

Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

Extinguishing media which must not be used for safety reasons No information available.

# 5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.

# Hazardous Combustion Products

Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Hydrogen chloride gas.

# 5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

# **SECTION 6: ACCIDENTAL RELEASE MEASURES**

# 6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

#### 6.2. Environmental precautions

Should not be released into the environment.

## 6.3. Methods and material for containment and cleaning up

Keep in suitable, closed containers for disposal. Sweep up and shovel into suitable containers for disposal.

#### 6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

**SECTION 7: HANDLING AND STORAGE** 

#### 7.1. Precautions for safe handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.

#### **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

# 7.2. Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

Technical Rules for Hazardous Substances (TRGS) 510 Class 11 Storage Class (LGK) (Germany)

## 7.3. Specific end use(s)

Use in laboratories

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION** 

# 8.1. Control parameters

#### **Exposure limits**

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

#### Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Derived No Effect Level (DNEL) / Derived Minimum Effect Level (DMEL) No information available

# Predicted No Effect Concentration (PNEC)

No information available.

# 8.2. Exposure controls

# **Engineering Measures**

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

## Personal protective equipment

**Eye Protection** Goggles (European standard - EN 166)

#### Hand Protection Protective gloves

Glove material Nitrile rubber Neoprene Natural rubber PVC	Breakthrough time See manufacturers recommendations	Glove thickness -	EU standard EN 374	Glove comments (minimum requirement)
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Skin and body protection Long sleeved clothing.

# Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts. abrasion.

Remove gloves with care avoiding skin contamination.

Respiratory Protection	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly
Large scale/emergency use	Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced <b>Recommended Filter type:</b> Particulates filter conforming to EN 143
Small scale/Laboratory use	Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. <b>Recommended half mask:-</b> Particle filtering: EN149:2001 When RPE is used a face piece Fit Test should be conducted
Environmental exposure controls	No information available.

# **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

# 9.1. Information on basic physical and chemical properties

Physical State	Powder Solid	
Appearance Odor Odor Threshold Melting Point/Range Softening Point	White Odorless No data available 249 - 252 °C / 480 - 486 °F No data available No information available	
Boiling Point/Range Flammability (liquid) Flammability (solid,gas) Explosion Limits	No information available No information available No data available	Solid
Flash Point Autoignition Temperature Decomposition Temperature pH	No information available No data available No data available 3.22	Method - No information available
Viscosity Water Solubility Solubility in other solvents	Not applicable Completely soluble No information available	Solid
Partition Coefficient (n-octanol/wate Vapor Pressure	er) No data available	
Density / Specific Gravity Bulk Density	No data available No data available No data available	
Vapor Density Particle characteristics	Not applicable No data available	Solid
9.2. Other information		

Molecular FormulaC5 H9 N3 . 2 H ClMolecular Weight184.07Evaporation RateNot applicable - Solid

**SECTION 10: STABILITY AND REACTIVITY** 

10.1. Reactivity	None known, based on information available	
10.2. Chemical stability	Stable under normal conditions. Hygroscopic.	
10.3. Possibility of hazardous reactions		
Hazardous Polymerization Hazardous Reactions	No information available. None under normal processing.	
10.4. Conditions to avoid	Incompatible products. Exposure to moist air or water.	
10.5. Incompatible materials	Strong oxidizing agents.	

10.6. Hazardous decomposition products

Nitrogen oxides (NOx). Carbon monoxide (CO). Carbon dioxide (CO2). Hydrogen chloride

gas.

# **SECTION 11: TOXICOLOGICAL INFORMATION**

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

Product Information	
(a) acute toxicity; Oral Dermal Inhalation	No data available No data available No data available
(b) skin corrosion/irritation;	Category 2
(c) serious eye damage/irritation;	Category 2
(d) respiratory or skin sensitization; Respiratory Skin	Category 1 Category 1 May cause sensitization by skin contact
(e) germ cell mutagenicity;	No data available
(f) carcinogenicity;	No data available There are no known carcinogenic chemicals in this product
(g) reproductive toxicity;	No data available
(h) STOT-single exposure;	Category 3
Results / Target organs	Respiratory system.
(i) STOT-repeated exposure;	No data available
Target Organs	No information available.
(j) aspiration hazard;	Not applicable Solid
Other Adverse Effects	The toxicological properties have not been fully investigated.
Symptoms / effects,both acute and delayed	Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing.
11.2. Information on other hazards	
Endocrine Disrupting Properties	Assess endocrine disrupting properties for human health. This product does not contain any known or suspected endocrine disruptors.

# Histamine dihydrochloride

# **SECTION 12: ECOLOGICAL INFORMATION**

#### 12.1. Toxicity Ecotoxicity effects

Do not empty into drains.

12.2. Persistence and degradability Persistence	Soluble in water, Persistence is unlikely, based on information available.
12.3. Bioaccumulative potential	Bioaccumulation is unlikely
<u>12.4. Mobility in soil</u>	The product is water soluble, and may spread in water systems Will likely be mobile in the environment due to its water solubility. Highly mobile in soils
12.5. Results of PBT and vPvB assessment	No data available for assessment.
<u>12.6. Endocrine disrupting</u> properties Endocrine Disruptor Information	This product does not contain any known or suspected endocrine disruptors

12.7. Other auverse effects	
Persistent Organic Pollutant	This product does not contain any known or suspected substance
Ozone Depletion Potential	This product does not contain any known or suspected substance

# **SECTION 13: DISPOSAL CONSIDERATIONS**

## 13.1. Waste treatment methods

12.7 Other advarce offects

Waste from Residues/Unused Products	Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.
Contaminated Packaging	Dispose of this container to hazardous or special waste collection point.
European Waste Catalogue (EWC)	According to the European Waste Catalog, Waste Codes are not product specific, but application specific.
Other Information	Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains.

# **SECTION 14: TRANSPORT INFORMATION**

# IMDG/IMO

Not regulated

14.1. UN number14.2. UN proper shipping name14.3. Transport hazard class(es)14.4. Packing group

ADR	Not regulated
<u>14.1. UN number</u> <u>14.2. UN proper shipping name</u> <u>14.3. Transport hazard class(es)</u> <u>14.4. Packing group</u>	
IATA	Not regulated
<u>14.1. UN number</u> <u>14.2. UN proper shipping name</u> 14.3. Transport hazard class(es) 14.4. Packing group	
14.5. Environmental hazards	No hazards identified
14.6. Special precautions for user	No special precautions required.
14.7. Maritime transport in bulk according to IMO instruments	Not applicable, packaged goods

# **SECTION 15: REGULATORY INFORMATION**

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

## International Inventories

Europe (EINECS/ELINCS/NLP), China (IECSC), Taiwan (TCSI), Korea (KECL), Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Australia (AICS), New Zealand (NZIoC), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

Component	CAS No	EINECS	ELINCS	NLP	IECSC	TCSI	KECL	ENCS	ISHL
1H-Imidazole-4-ethanamine, dihydrochloride	56-92-8	200-298-4	-	-	Х	Х	-	-	-

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	DSL	NDSL	AICS	NZIoC	PICCS
1H-Imidazole-4-ethanamine, dihvdrochloride	56-92-8	X	ACTIVE	Х	-	х	Х	х

Legend: X - Listed '-' - Not Listed KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

#### Authorisation/Restrictions according to EU REACH

Not applicable

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization		REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High
			Cubotanooo	Concern (SVHC)
1H-Imidazole-4-ethanamine, dihydrochloride	56-92-8	-	-	-

# Seveso III Directive (2012/18/EC)

Component	CAS No	Seveso III Directive (2012/18/EC) -	Seveso III Directive (2012/18/EC) -
		Qualifying Quantities for Major Accident	Qualifying Quantities for Safety Report
		Notification	Requirements
1H-Imidazole-4-ethanamine,	56-92-8	Not applicable	Not applicable

# Histamine dihydrochloride

dihydrochloride

# Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals

Not applicable

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)? Not applicable

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work .

#### **National Regulations**

UK - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

WGK Classification

Water endangering class = 3 (self classification)

#### 15.2. Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) has not been conducted

# **SECTION 16: OTHER INFORMATION**

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

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

H335 - May cause respiratory irritation

#### Legend

CAS - Chemical Abstracts Service	<b>TSCA</b> - United States Toxic Substances Control Act Section 8(b) Inventory
EINECS/ELINCS - European Inventory of Existing Commercial Chemica Substances/EU List of Notified Chemical Substances PICCS - Philippines Inventory of Chemicals and Chemical Substances IECSC - Chinese Inventory of Existing Chemical Substances KECL - Korean Existing and Evaluated Chemical Substances	5
WEL - Workplace Exposure Limit	<b>TWA</b> - Time Weighted Average
ACGIH - American Conference of Governmental Industrial Hygienists	<b>IARC</b> - International Agency for Research on Cancer
DNEL - Derived No Effect Level	Predicted No Effect Concentration (PNEC)
RPE - Respiratory Protective Equipment	<b>LD50</b> - Lethal Dose 50%
LC50 - Lethal Concentration 50%	EC50 - Effective Concentration 50%
NOEC - No Observed Effect Concentration	POW - Partition coefficient Octanol:Water
PBT - Persistent. Bioaccumulative. Toxic	vPvB - very Persistent, very Bioaccumulative

## Histamine dihydrochloride

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ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code OECD - Organisation for Economic Co-operation and Development BCF - Bioconcentration factor Key literature references and sources for data https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

ICAO/IATA - International Civil Aviation Organization/International Air Transport Association MARPOL - International Convention for the Prevention of Pollution from Ships ATE - Acute Toxicity Estimate VOC - (Volatile Organic Compound)

# **Training Advice**

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

Creation Date	20-Dec-2007
Revision Date	21-Sep-2023
Revision Summary	Not applicable.

# This safety data sheet complies with Regulation UK SI 2019/758 and UK SI 2020/1577 as amended.

#### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

# **End of Safety Data Sheet**