

SAFETY DATA SHEET

Revision Date 28-Mar-2024

Revision Number 3

1. Identification

Product Name

L-Histidine methyl ester dihydrochloride

Cat No. : A12386

CAS No Synonyms

Recommended Use Uses advised against

No information available Laboratory chemicals.

ed against Food, drug, pesticide or biocidal product use.

7389-87-9

Details of the supplier of the safety data sheet

<u>Company</u>

Thermo Fisher Scientific Chemicals, Inc. 30 Bond Street Ward Hill, MA 01835-8099 Tel: 800-343-0660 Fax: 800-322-4757

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

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/Irritation Serious Eye Damage/Eye Irritation Specific target organ toxicity (single exposure) Target Organs - Respiratory system. Category 2 Category 2 Category 3

Label Elements

Signal Word Warning

Hazard Statements Causes skin irritation Causes serious eye irritation May cause respiratory irritation



Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

Skin

IF ON SKIN: Wash with plenty of soap and water

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash before reuse

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

Storage

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

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None identified

3. Composition/Information on Ingredients

| Component | | CAS No | Weight % | | |
|--------------------------------------|--|----------------------|----------|--|--|
| Methyl L-histidinate dihydrochloride | | 7389-87-9 | 97 | | |
| | | | | | |
| | 4. | First-aid measures | | | |
| Eye Contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. medical attention. | | | | |
| Skin Contact | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention. | | | | |
| Inhalation | Remove from exposure, lie down. Remove to fresh air. If not breathing, give artificial respiration. Get medical attention. | | | | |
| Ingestion | Clean mouth with water. Get medical attention. | | | | |
| Most important symptoms and effects | No information available. | | | | |
| Notes to Physician | Treat symptomatically | | | | |
| | 5 Ei | re-fighting measures | | | |

| Suitable Extinguishing Media | Water spray. Carbon dioxide (CO 2). Dry chemical. Chemical foam. |
|--|--|
| Unsuitable Extinguishing Media | No information available |
| Flash Point Method - | No information available No information available |
| Autoignition Temperature Explosion Limits | No information available |
| Upper | No data available |
| Lower | No data available |
| Sensitivity to Mechanical Impac | |
| Sensitivity to Static Discharge | No information available |

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Carbon monoxide (CO). Carbon dioxide (CO₂).

Protective Equipment and Precautions for Firefighters

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

| <u>NFPA</u> Health | Flammability | Instability | Physical hazards | | | | |
|--|--|--|---|--|--|--|--|
| 2 | 1 | 0 | N/A | | | | |
| | 6. Accidental re | lease measures | | | | | |
| Personal Precautions Environmental Precaution | I | Ensure adequate ventilation. Use personal protective equipment as required. See Section 12 for additional Ecological Information. | | | | | |
| Methods for Containmen Up | nt and Clean Sweep up and shovel into | suitable containers for disposa | al. | | | | |
| | 7. Handling | and storage | | | | | |
| Handling | Avoid contact with skin an seek immediate medical a | | o not ingest. If swallowed then | | | | |
| Storage. | | Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Incompatible Materials. Strong oxidizing agents. | | | | | |
| | 8. Exposure controls | / personal protecti | on | | | | |
| Exposure Guidelines | | tain any hazardous materials v gion specific regulatory bodies | | | | | |
| Engineering Measures | | on, especially in confined areas ose to the workstation location. | s. Ensure that eyewash stations | | | | |
| Personal Protective Equ | lipment | | | | | | |
| Eye/face Protection | | ve eyeglasses or chemical safe ection regulations in 29 CFR 1 | ety goggles as described by 910.133 or European Standard | | | | |

| Skin and body protection | Wear appropriate protective gloves and clothing to prevent skin exposi- | | | |
|--------------------------|---|--|--|--|
| Respiratory Protection | No protective equipment is needed under normal use conditions. | | | |
| Hygiene Measures | Handle in accordance with good industrial hygiene and safety practice. | | | |

9. Physical and chemical properties

| Physical State | Powder Solid |
|--|--------------------------|
| Appearance | White |
| Odor | Odorless |
| Odor Threshold | No information available |
| pH | No information available |
| Melting Point/Range | 207 °C / 404.6 °F |
| Boiling Point/Range | No information available |
| Flash Point | No information available |
| Evaporation Rate | Not applicable |
| Flammability (solid,gas) | No information available |
| Flammability or explosive limits | |
| Upper | No data available |
| Lower | No data available |
| Vapor Pressure | No information available |
| Vapor Density | Not applicable |
| Specific Gravity | No information available |
| Solubility | No information available |
| Partition coefficient; n-octanol/water | No data available |
| Autoignition Temperature | No information available |
| Decomposition Temperature | No information available |
| Viscosity | Not applicable |
| Molecular Formula | C7 H11 N3 O2 . 2 H CI |
| Molecular Weight | 242.11 |
| | |

10. Stability and reactivity

| Reactive Hazard | None known, based on information available | | |
|---|--|--|--|
| Stability | Stable under normal conditions. | | |
| Conditions to Avoid | Incompatible products. | | |
| Incompatible Materials | Strong oxidizing agents | | |
| Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2) | | | |
| Hazardous Polymerization | No information available. | | |
| Hazardous Reactions | None under normal processing. | | |
| | | | |

11. Toxicological information

Acute Toxicity

| Product Information Component Information | No acute toxicity information is available for this product | | | |
|--|---|--|--|--|
| Toxicologically Synergistic Products | No information available | | | |
| Delayed and immediate effects as v | vell as chronic effects from short and long-term exposure | | | |
| Irritation | No information available | | | |
| Sensitization | No information available | | | |

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component | CAS No | IARC | NTP | ACGIH | OSHA | Maxiaa | | | |
|--|-----------------|---|--------------|------------|------------|----------------------|--|--|--|
| Component Methyl L-histidinate | 7389-87-9 | Not listed | Not listed | Not listed | Not listed | Mexico Not listed | | | |
| dihydrochloride | 1309-01-9 | Not listed | NOL IISLEU | NUL IISLEU | NUL IISLEU | Not listed | | | |
| Mutagenic Effects | | No information available | | | | | | | |
| Reproductive Effect | ts | No information available. | | | | | | | |
| Developmental Effe | cts | No information ava | ailable. | | | | | | |
| Teratogenicity | | No information ava | ailable. | | | | | | |
| STOT - single expos STOT - repeated ex | | Respiratory syster None known | n | | | | | | |
| Aspiration hazard | | No information ava | ailable | | | | | | |
| Symptoms / effects delayed | ,both acute and | No information ava | ailable | | | | | | |
| Endocrine Disruptor Information No information available | | | | | | | | | |
| Other Adverse Effe | cts | The toxicological properties have not been fully investigated. | | | | | | | |
| 12. Ecological information | | | | | | | | | |
| Ecotoxicity Do not empty into dra | ains. | | | | | | | | |
| Persistence and De | gradability | No information ava | ailable | | | | | | |
| Bioaccumulation/ A | ccumulation | No information ava | ailable. | | | | | | |
| Mobility No information available. | | | | | | | | | |
| 13. Disposal considerations | | | | | | | | | |
| Waste Disposal Met | hods | Chemical waste generators must determine whether a discarded chemical is classifie hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification. | | | | gional, and | | | |
| | | 14. Trar | sport inform | mation | | | | | |

| | 14. Transport information |
|--------------------|----------------------------|
| DOT TDG IATA | Not regulated |
| <u>TDG</u> | Not regulated |
| <u>IATA</u> | Not regulated |
| IMDG/IMO | Not regulated |
| | 15. Regulatory information |

United States of America Inventory

| Component | CAS No | TSCA | TSCA Inventory notification - Active-Inactive | TSCA - EPA Regulatory Flags |
|---|-----------|------|--|--------------------------------|
| Methyl L-histidinate dihydrochloride | 7389-87-9 | - | - | - |

Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed '-' - Not Listed

TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT)

Not applicable

TSCA 12(b) - Notices of Export

Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

| Component | CAS No | DSL | NDSL | EINECS | PICCS | ENCS | ISHL | AICS | IECSC | KECL |
|----------------------|-----------|-----|------|-----------|-------|------|------|------|-------|------|
| Methyl L-histidinate | 7389-87-9 | - | - | 230-973-9 | - | - | | - | Х | - |
| dihydrochloride | | | | | | | | | | |

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

| CWA (Clean Water Act) | Not applicable |
|---|----------------|
| Clean Air Act | Not applicable |
| OSHA - Occupational Safety and Health Administration | Not applicable |

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

| California Proposition 65 | This product does not contain any Proposition 65 chemicals. |
|--|---|
| U.S. State Right-to-Know Regulations | Not applicable |
| U.S. Department of Transportation Reportable Quantity (RQ): DOT Marine Pollutant DOT Severe Marine Pollutant | N N N |
| U.S. Department of Homeland Security | This product does not contain any DHS chemicals. |
| Other International Regulations | |
| Mexico - Grade | No information available |

Authorisation/Restrictions according to EU REACH

Not applicable

| Component | CAS No | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | J J. | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|--------------------------------------|-----------|---|------|---|
| Methyl L-histidinate dihydrochloride | 7389-87-9 | - | - | - |

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

| Component | CAS No | OECD HPV | Persistent Organic Pollutant | Ozone Depletion Potential | Restriction of Hazardous Substances (RoHS) |
|---|-----------|----------------|---------------------------------|------------------------------|--|
| Methyl L-histidinate dihydrochloride | 7389-87-9 | Not applicable | Not applicable | Not applicable | Not applicable |

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

Other International Regulations

| Component | CAS No | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements | Convention (PIC) | Basel Convention (Hazardous Waste) |
|---|-----------|---|--|------------------|---------------------------------------|
| Methyl L-histidinate dihydrochloride | 7389-87-9 | Not applicable | Not applicable | Not applicable | Not applicable |

| | 16. Other information |
|---|--|
| Prepared By | Health, Safety and Environmental Department Email: chem.techinfo@thermofisher.com www.thermofisher.com |
| Revision Date Print Date Revision Summary | 28-Mar-2024 28-Mar-2024 New emergency telephone response service provider. |

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 SDS