

ALFAA44248

# 2-Amino-2-thiazoline hydrochloride

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

产品说明:	2-Amino-2-thiazoline hydrochloride
Product Description:	2-Amino-2-thiazoline hydrochloride
Cat No. :	<b>44248</b>
CAS No	3882-98-2
Supplier	Avocado Research Chemicals Ltd. (Part of Thermo Fisher Scientific) Shore Road, Heysham Lancashire, LA3 2XY, United Kingdom Office Tel: +44 (0) 1524 850506 Office Fax: +44 (0) 1524 850608
Emergency Telephone Number	For information <b>US</b> call: 001-800-227-6701 / <b>Europe</b> call: +32 14 57 52 11 Emergency Number <b>US:</b> 001-201-796-7100 / <b>Europe:</b> +32 14 57 52 99 <b>CHEMTREC</b> Tel. No. <b>US:</b> 001-800-424-9300 / <b>Europe:</b> 001-703-527-3887
E-mail address	begel.sdsdesk@thermofisher.com
Recommended Use	Laboratory chemicals.
Uses advised against	No Information available

# **SECTION 2. HAZARD IDENTIFICATION**

Physical State
Solid Crystalline

Appearance No information available Odor No information available

# **Emergency Overview**

The product contains no substances which at their given concentration are considered to be hazardous to health.

#### Classification of the substance or mixture

Based on available data, the classification criteria are not met

#### Label Elements

None required

#### Physical and Chemical Hazards

None identified. Health Hazards The product contains no substances which at their given concentration are considered to be hazardous to health. Environmental hazards Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

This product does not contain any known or suspected endocrine disruptors.

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## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight %
4,5-Dihydrothiazol-2-amine monohydrochloride	3882-98-2	<=100

## SECTION 4. FIRST AID MEASURES

#### 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. Get medical attention immediately if symptoms occur.

#### Inhalation

Remove to fresh air. Get medical attention immediately if symptoms occur.

#### Ingestion

Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

#### Most important symptoms and effects

None reasonably foreseeable.

#### Self-Protection of the First Aider

No special precautions required.

#### Notes to Physician

Treat symptomatically.

**SECTION 5. FIRE-FIGHTING MEASURES** 

#### Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

## Extinguishing media which must not be used for safety reasons

No information available.

#### **Specific Hazards Arising from the Chemical**

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

#### **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.

# SECTION 6. ACCIDENTAL RELEASE MEASURES

#### **Personal Precautions**

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

#### **Environmental Precautions**

Should not be released into the environment. See Section 12 for additional Ecological Information.

#### Methods for Containment and Clean Up

Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

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Refer to protective measures listed in Sections 8 and 13.

## **SECTION 7. HANDLING AND STORAGE**

#### Handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation. Avoid dust formation.

#### Storage

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

#### Specific Use(s)

Use in laboratories

#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## Control Parameters

#### Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust

#### Exposure Controls

#### **Engineering Measures**

None under normal use conditions. .

#### Personal protective equipment

Eve Protection	Wear safety glasses with side shields (or goggles) (European standard - EN 166)
	The second second with side shields (of goggies) (European standard Ert 198)

Hand Protection Protective gloves

 Glove material Natural rubber Nitrile rubber Neoprene	Breakthrough time See manufacturers recommendations	Glove thickness -	EU standard EN 374	Glove comments (minimum requirement)
PVC				

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.

Skin and body protection	Long sleeved clothing
Respiratory Protection	No protective equipment is needed under normal use conditions.
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> Particle filter
Small scale/Laboratory use	Maintain adequate ventilation <b>Recommended half mask:-</b> Valve filtering: EN405; or; Half mask: EN140; plus filter, EN 141

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls** No information available.

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

Appearance Physical State	Solid Crystalline	
Odor Odor Threshold pH Melting Point/Range Softening Point Boiling Point/Range Flash Point Evaporation Rate Flammability (solid,gas)	No information available No data available No information available 200 - 202 °C / 392 - 395.6 °F No data available No information available No information available Not applicable No information available	<b>Method -</b> No information available Solid
Explosion Limits	No data available	
Vapor Pressure Vapor Density Specific Gravity / Density Bulk Density Water Solubility Solubility in other solvents Partition Coefficient (n-octanol/wat	No data available Not applicable No data available No data available No information available No information available	Solid
Autoignition Temperature Decomposition Temperature Viscosity Explosive Properties Oxidizing Properties	No data available No data available Not applicable No information available No information available	Solid

# **SECTION 10. STABILITY AND REACTIVITY**

Stability	Stable under normal conditions.
Hazardous Reactions Hazardous Polymerization	None under normal processing. No information available.
Conditions to Avoid	None known.
Materials to avoid	No information available.

Hazardous Decomposition Products None under normal use conditions.

# SECTION 11. TOXICOLOGICAL INFORMATION

**Product Information** 

(a) acute toxicity;

(b) skin corrosion/irritation; No data available

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(c) serious eye damage/irritation;	No data available
(d) respiratory or skin sensitization; Respiratory Skin	No data available No data available
(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;	No data available
(i) STOT-repeated exposure;	No data available
Target Organs	No information available.
(j) aspiration hazard;	Not applicable Solid
Symptoms / effects,both acute and delayed	No information available
	SECTION 12. ECOLOGICAL INFORMATION
Ecotoxicity effects	SECTION 12. ECOLOGICAL INFORMATION Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.
Ecotoxicity effects Persistence and Degradability	Contains no substances known to be hazardous to the environment or that are not
	Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.
Persistence and Degradability	Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants. No information available
Persistence and Degradability Bioaccumulative Potential	Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants. No information available No information available This product does not contain any known or suspected endocrine disruptors This product does not contain any known or suspected substance This product does not contain any known or suspected substance
Persistence and Degradability Bioaccumulative Potential Mobility in soil Endocrine Disruptor Information Persistent Organic Pollutant	Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants. No information available No information available No information available This product does not contain any known or suspected endocrine disruptors This product does not contain any known or suspected substance
Persistence and Degradability Bioaccumulative Potential Mobility in soil Endocrine Disruptor Information Persistent Organic Pollutant	Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants. No information available No information available This product does not contain any known or suspected endocrine disruptors This product does not contain any known or suspected substance This product does not contain any known or suspected substance

# SAFETY DATA SHEET 2-Amino-2-thiazoline hydrochloride

# Other Information Waste codes should be assigned by the user based on the application for which the product was used. SECTION 14. TRANSPORT INFORMATION Road and Rail Transport Not Regulated IMDG/IMO Not regulated IATA Not regulated Special Precautions for User No special precautions required

# **SECTION 15. REGULATORY INFORMATION**

#### International Inventories

X = listed, China (IECSC), Europe (EINECS/ELINCS/NLP), U.S.A. (TSCA), Canada (DSL/NDSL), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), Korea (KECL).

Component	The Inventory of Hazardous Chemicals (2015 Edition)	List of dangerous goods GB 12268 - 2012	TCSI	IECSC	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	AICS	KECL
4,5-Dihydrothiazol-2-a mine monohydrochloride	-	-	Х	-	223-416-6	-	-	-	-		-	-

# National Regulations

# SECTION 16. OTHER INFORMATION

Prepared By Revision Date Revision Summary Health, Safety and Environmental Department 02-May-2024 New emergency telephone response service provider.

## **Training Advice**

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

#### Legend

CAS - Chemical Abstracts Service	<b>TSCA</b> - United States Toxic Substances Control Act Section 8(b) Inventory
<b>EINECS/ELINCS</b> - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances	Substances List
	ENCS - Japanese Existing and New Chemical Substances AICS - Australian Inventory of Chemical Substances NZIOC - New Zealand Inventory of Chemicals

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WEL - Workplace Exposure Limit	TWA - Time Weighted Average
ACGIH - American Conference of Governmental Industrial Hygienists	IARC - International Agency for Research on Cancer
DNEL - Derived No Effect Level	PNEC - Predicted No Effect Concentration
RPE - Respiratory Protective Equipment	LD50 - Lethal Dose 50%
LC50 - Lethal Concentration 50%	EC50 - Effective Concentration 50%
NOEC - No Observed Effect Concentration	<b>POW</b> - Partition coefficient Octanol:Water
PBT - Persistent, Bioaccumulative, Toxic	vPvB - very Persistent, very Bioaccumulative
ICAO/IATA - International Civil Aviation Organization/International Air Transport Association ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road OECD - Organisation for Economic Co-operation and Development BCF - Bioconcentration factor	IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code MARPOL - International Convention for the Prevention of Pollution from Ships ATE - Acute Toxicity Estimate VOC - (Volatile Organic Compound)

# Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

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**