

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

Revision Date 23-Feb-2024

**Revision Number** 3

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

## 1.1. Product identifier

| Product Description: |  |
|----------------------|--|
| Cat No. :            |  |
| CAS No               |  |
| Molecular Formula    |  |

2-Amino-4-phenylthiazole hydrobromidemonohydrate A19542 52253-69-7 C9 H8 N2 S.HBr.H2 O

## 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

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

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

Skin Corrosion/Irritation Serious Eye Damage/Eye Irritation Category 2 (H315) Category 2 (H319)

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Specific target organ toxicity - (single exposure)

Category 3 (H335)

**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

Warning

## Hazard Statements

- H315 Causes skin irritation
- H319 Causes serious eye irritation
- H335 May cause respiratory irritation

## **Precautionary Statements**

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

- 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
- P332 + P313 If skin irritation occurs: Get medical advice/attention

## 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<br>GB-CLP Regulations UK SI 2019/720 and<br>UK SI 2020/1567 |
|--|------------|-------|----------|---|
| 2-Amino-4-phenylthiazole hydrobromide<br>monohydrate | 52253-69-7 |       | <=100    | Skin Irrit. 2 (H315)<br>Eye Irrit. 2 (H319)<br>STOT SE 3 (H335)                               |

Full text of Hazard Statements: see section 16

## **SECTION 4: FIRST AID MEASURES**

### 2-Amino-4-phenylthiazole hydrobromidemonohydrate

| 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 | No special precautions required.  |
| 4.2. Most important symptoms and   | effects, both acute and delayed   |

None reasonably foreseeable.

## 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

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

None under normal use conditions.

## 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. See Section 12 for additional Ecological Information.

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

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

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### 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. Avoid ingestion and inhalation. Avoid dust formation. Do not get in eyes, on skin, or on clothing.

### **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

Store under an inert atmosphere. Keep container tightly closed in a dry and well-ventilated place. Protect from moisture.

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** 

None under normal use conditions. Ensure that eyewash stations and safety showers are close to the workstation location.

| Personal protective equ<br>Eye Protection                             |   | (European standard   | I - EN 166)           |   |
|---|---|----------------------|-----------------------|---|
| Hand Protection   | Protectiv   | ve gloves            |                       |   |
| Glove material<br>Natural rubber<br>Nitrile rubber<br>Neoprene<br>PVC | Breakthrough time<br>See manufacturers<br>recommendations | Glove thickness<br>- | EU standard<br>EN 374 | Glove comments<br>(minimum requirement) |
| Skin and body prote   | ection Long sle   | eved 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     | 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<br><b>Recommended half mask:-</b> Valve filtering: EN405; or; Half mask: EN140; plus filter, EN<br>141  |

Environmental exposure controls No information available.

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

## 9.1. Information on basic physical and chemical properties

| Physical State   | Solid Crystalline   |                                   |
|--|---|-----------------------------------|
| Appearance<br>Odor<br>Odor Threshold<br>Melting Point/Range<br>Softening Point<br>Boiling Point/Range<br>Flammability (liquid)<br>Flammability (solid,gas)<br>Explosion Limits | White<br>No information available<br>No data available<br>180 - 183 °C / 356 - 361.4 °F<br>No data available<br>No information available<br>Not applicable<br>No information available<br>No data available | Solid                             |
| Flash Point<br>Autoignition Temperature<br>Decomposition Temperature<br>pH<br>Viscosity  | No information available<br>No data available<br>No data available<br>No information available<br>Not applicable  | Method - No information available |
| Water Solubility<br>Solubility in other solvents<br>Partition Coefficient (n-octanol/water<br>Vapor Pressure<br>Density / Specific Gravity<br>Bulk Density<br>Vapor Density    | No information available<br>No information available<br>er)<br>No data available<br>No data available<br>No data available<br>No data available<br>Not applicable   | Solid                             |
| Particle characteristics   | No data available   |                                   |

## 9.2. Other information

Molecular Formula Molecular Weight Evaporation Rate C9 H8 N2 S.HBr.H2 O 275.17 (257.15anhy) Not applicable - Solid

## **SECTION 10: STABILITY AND REACTIVITY**

10.1. Reactivity

None known, based on information available

10.2. Chemical stability

Hygroscopic.

- 10.3. Possibility of hazardous reactions
- Hazardous PolymerizationNo information available.Hazardous ReactionsNone under normal processing.10.4. Conditions to avoid
  - Exposure to moist air or water.
- 10.5. Incompatible materials

None known.

### 10.6. Hazardous decomposition products

None under normal use conditions.

## **SECTION 11: TOXICOLOGICAL INFORMATION**

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

### **Product Information**

| (a) acute toxicity;<br>Oral<br>Dermal<br>Inhalation           | No data available<br>No data available<br>No data available |
|---|---|
| (b) skin corrosion/irritation;                                | Category 2  |
| (c) serious eye damage/irritation;                            | Category 2  |
| (d) respiratory or skin sensitization;<br>Respiratory<br>Skin | No data available<br>No data available                      |
| (e) germ cell mutagenicity;                                   | No data available   |
| (f) carcinogenicity;  | No data available   |
|   | There are no known carcinogenic chemicals in this product   |

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| (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<br>Solid   |
| Symptoms / effects,both acute and<br>delayed | No information available.   |
| 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. |
| SE   | CTION 12: ECOLOGICAL INFORMATION  |
| <u>12.1. Toxicity</u><br>Ecotoxicity effects | Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.         |
|  |   |
| 12.2. Persistence and degradability          | No information available  |
|  |   |

| 12.3. Bioaccumulative potential  | No information available  |
|--|---|
| 12.4. Mobility in soil   | No information available  |
| <u>12.5. Results of PBT and vPvB</u><br>assessment                                 | No data available for assessment.   |
| <u>12.6. Endocrine disrupting</u><br>properties<br>Endocrine Disruptor Information | This product does not contain any known or suspected endocrine disruptors |

| <u>12.7. Other adverse effects</u><br>Persistent Organic Pollutant<br>Ozone Depletion Potential | This product does not contain any known or suspected substance<br>This product does not contain any known or suspected substance |
|---|--|
|---|--|

## SECTION 13: DISPOSAL CONSIDERATIONS

## 13.1. Waste treatment methods

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.

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| 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 number 14.2. UN proper shipping name 14.3. Transport hazard class(es) 14.4. Packing group

ADR

ΙΑΤΑ

Not regulated

| 14.1. UN number                  |
|----------------------------------|
| 14.2. UN proper shipping name    |
| 14.3. Transport hazard class(es) |
| 14.4. Packing group              |

Not regulated 14.2. UN proper shipping name

14.3. Transport hazard class(es) 14.4. Packing group

14.1. UN number

| 14.5. Environmental hazards        | No hazards identified            |
|------------------------------------|----------------------------------|
| 14.6. Special precautions for user | No special precautions required. |

14.7. Maritime transport in bulk Not applicable, packaged goods

according to IMO instruments

## **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 |
|--|------------|--------|--------|-----|-------|------|------|------|------|
| 2-Amino-4-phenylthiazole<br>hydrobromide monohydrate | 52253-69-7 | -      | -      | -   | -     | Х    | -    | -    | -    |

| Component  | CAS No     | TSCA | TSCA Inventory<br>notification -<br>Active-Inactive | DSL | NDSL | AICS | NZIoC | PICCS |
|--|------------|------|---|-----|------|------|-------|-------|
| 2-Amino-4-phenylthiazole<br>hydrobromide monohydrate | 52253-69-7 | -    | -   | -   | -    | -    | -     | -     |

### Authorisation/Restrictions according to EU REACH

Not applicable

| Component  | CAS No     | REACH (1907/2006) -<br>Annex XIV - Substances<br>Subject to Authorization | 0 | REACH Regulation (EC<br>1907/2006) article 59 -<br>Candidate List of<br>Substances of Very High<br>Concern (SVHC) |
|--|------------|---|---|---|
| 2-Amino-4-phenylthiazole<br>hydrobromide monohydrate | 52253-69-7 | -   | - | -   |

### Seveso III Directive (2012/18/EC)

| Component  | CAS No     | Seveso III Directive (2012/18/EC) -<br>Qualifying Quantities for Major Accident<br>Notification | Seveso III Directive (2012/18/EC) -<br>Qualifying Quantities for Safety Report<br>Requirements |
|--|------------|---|--|
| 2-Amino-4-phenylthiazole<br>hydrobromide monohydrate | 52253-69-7 | Not applicable  | Not applicable   |

# 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

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

## Legend

TSCA - United States Toxic Substances Control Act Section 8(b)

**CAS** - Chemical Abstracts Service

EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances/EU List of Notified Chemical Substances PICCS - Philippines Inventory of Chemicals and Chemical Substances Eist ENCS - Japanese Existing and New Chemical Substances

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| IECSC - Chinese Inventory of Existing Chemical Substances<br>KECL - Korean Existing and Evaluated Chemical Substances   | AICS - Australian Inventory of Chemical Substances<br>NZIOC - New Zealand Inventory of Chemicals   |
|---|--|
| <ul> <li>WEL - Workplace Exposure Limit</li> <li>ACGIH - American Conference of Governmental Industrial Hygienists</li> <li>DNEL - Derived No Effect Level</li> <li>RPE - Respiratory Protective Equipment</li> <li>LC50 - Lethal Concentration 50%</li> <li>NOEC - No Observed Effect Concentration</li> <li>PBT - Persistent, Bioaccumulative, Toxic</li> </ul>   | <ul> <li>TWA - Time Weighted Average</li> <li>IARC - International Agency for Research on Cancer</li> <li>Predicted No Effect Concentration (PNEC)</li> <li>LD50 - Lethal Dose 50%</li> <li>EC50 - Effective Concentration 50%</li> <li>POW - Partition coefficient Octanol:Water</li> <li>vPvB - very Persistent, very Bioaccumulative</li> </ul> |
| <ul> <li>ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road</li> <li>IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code</li> <li>OECD - Organisation for Economic Co-operation and Development BCF - Bioconcentration factor</li> <li>Key literature references and sources for data https://echa.europa.eu/information-on-chemicals</li> <li>Suppliers safety data sheet, Chemadvisor - LOLI, Merck index,</li> </ul> | ICAO/IATA - International Civil Aviation Organization/International Air<br>Transport Association<br>MARPOL - International Convention for the Prevention of Pollution from<br>Ships<br>ATE - Acute Toxicity Estimate<br>VOC - (Volatile Organic Compound)  |

### **Training Advice**

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

| Prepared By      | Health, Safety and Environmental Department        |
|------------------|--|
| Revision Date    | 23-Feb-2024  |
| Revision Summary | New emergency telephone response service provider. |

# 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