

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

### 1.1. Product identifier

Product Description: **5-Amino-2-(trifluoromethyl)pyridine**  
Cat No. : **H56968**  
CAS No 106877-33-2  
Molecular Formula C6 H5 F3 N2

### 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

Acute oral toxicity  
Skin Corrosion/Irritation

Category 3 (H301)  
Category 2 (H315)

# SAFETY DATA SHEET

5-Amino-2-(trifluoromethyl)pyridine

Revision Date 09-Mar-2024

Serious Eye Damage/Eye Irritation  
Skin Sensitization

Category 2 (H319)  
Category 1 (H317)

## 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

- H301 - Toxic if swallowed
- H315 - Causes skin irritation
- H319 - Causes serious eye irritation
- H317 - May cause an allergic skin reaction

## Precautionary Statements

- P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
- P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
- P332 + P313 - If skin irritation occurs: Get medical advice/attention
- P337 + P313 - If eye irritation persists: Get medical advice/attention
- P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention
- 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   |
|-------------------------------------|-------------|-------|----------|-------------------------------------------------------------------------------------------|
| 5-Amino-2-(trifluoromethyl)pyridine | 106877-33-2 |       | <=100    | Acute Tox. 3 (H301)<br>Skin Irrit. 2 (H315)<br>Eye Irrit. 2 (H319)<br>Skin Sens. 1 (H317) |

Full text of Hazard Statements: see section 16

## SECTION 4: FIRST AID MEASURES

# SAFETY DATA SHEET

5-Amino-2-(trifluoromethyl)pyridine

Revision Date 09-Mar-2024

## 4.1. Description of first aid measures

|                                           |                                                                                                                                                                                                                                                                                                                                |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>General Advice</b>                     | Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.                                                                                                                                                                                                                              |
| <b>Eye Contact</b>                        | In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.                                                                                                                                                                                                                              |
| <b>Skin Contact</b>                       | Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.                                                                                                                                                                                                                    |
| <b>Ingestion</b>                          | Do NOT induce vomiting. Call a physician or poison control center immediately.                                                                                                                                                                                                                                                 |
| <b>Inhalation</b>                         | Remove to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required. |
| <b>Self-Protection of the First Aider</b> | 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 acute and delayed

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**

Carbon dioxide (CO<sub>2</sub>). Powder. Water spray. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

#### **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**

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Nitrogen oxides (NO<sub>x</sub>), Hydrogen fluoride.

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

## 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. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

# SAFETY DATA SHEET

5-Amino-2-(trifluoromethyl)pyridine

Revision Date 09-Mar-2024

## 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. Avoid dust formation.

## 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. Do not get in eyes, on skin, or on clothing. Avoid dust formation. Use only under a chemical fume hood. Do not breathe (dust, vapor, mist, gas). Do not ingest. If swallowed then seek immediate medical assistance.

#### **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.

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

Class 6.1C

### 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)**

# SAFETY DATA SHEET

5-Amino-2-(trifluoromethyl)pyridine

Revision Date 09-Mar-2024

No information available.

## 8.2. Exposure controls

### Engineering Measures

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 | Breakthrough time                 | Glove thickness | EU standard | Glove comments        |
|----------------|-----------------------------------|-----------------|-------------|-----------------------|
| Nitrile rubber | See manufacturers recommendations | -               | EN 374      | (minimum requirement) |

**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** In case of insufficient ventilation, wear suitable respiratory equipment  
**Recommended Filter type:** Particle filter

**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.  
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           | Solid                         |                                   |
| Appearance               | White - Orange                |                                   |
| Odor                     | No information available      |                                   |
| Odor Threshold           | No data available             |                                   |
| Melting Point/Range      | 39 - 43 °C / 102.2 - 109.4 °F |                                   |
| Softening Point          | No data available             |                                   |
| Boiling Point/Range      | No information available      |                                   |
| Flammability (liquid)    | Not applicable                | Solid                             |
| Flammability (solid,gas) | No information available      |                                   |
| Explosion Limits         | No data available             |                                   |
| Flash Point              | > 110 °C / > 230 °F           | Method - No information available |
| Autoignition Temperature | No data available             |                                   |

# SAFETY DATA SHEET

5-Amino-2-(trifluoromethyl)pyridine

Revision Date 09-Mar-2024

|                                         |                          |       |
|-----------------------------------------|--------------------------|-------|
| Decomposition Temperature               | No data available        |       |
| pH                                      | No information available |       |
| Viscosity                               | Not applicable           | Solid |
| Water Solubility                        | No information available |       |
| Solubility in other solvents            | No information available |       |
| Partition Coefficient (n-octanol/water) |                          |       |
| Vapor Pressure                          | No data available        |       |
| Density / Specific Gravity              | No data available        |       |
| Bulk Density                            | No data available        |       |
| Vapor Density                           | Not applicable           | Solid |
| Particle characteristics                | No data available        |       |

## 9.2. Other information

|                   |                        |
|-------------------|------------------------|
| Molecular Formula | C6 H5 F3 N2            |
| Molecular Weight  | 162.11                 |
| Evaporation Rate  | Not applicable - Solid |

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

None known, based on information available

### 10.2. Chemical stability

Air sensitive.

### 10.3. Possibility of hazardous reactions

|                          |                               |
|--------------------------|-------------------------------|
| Hazardous Polymerization | No information available.     |
| Hazardous Reactions      | None under normal processing. |

### 10.4. Conditions to avoid

Incompatible products. Excess heat.

### 10.5. Incompatible materials

Oxidizing agent.

### 10.6. Hazardous decomposition products

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Nitrogen oxides (NO<sub>x</sub>). Hydrogen fluoride.

## SECTION 11: TOXICOLOGICAL INFORMATION

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

#### Product Information

|                     |                   |
|---------------------|-------------------|
| (a) acute toxicity; |                   |
| Oral                | Category 3        |
| Dermal              | No data available |
| Inhalation          | No data available |

(b) skin corrosion/irritation; Category 2

(c) serious eye damage/irritation; Category 2

(d) respiratory or skin sensitization;

# SAFETY DATA SHEET

5-Amino-2-(trifluoromethyl)pyridine

Revision Date 09-Mar-2024

|                                            |                                                                                                                                                                                        |
|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Respiratory<br>Skin                        | No data available<br>Category 1<br><br>May cause sensitization by skin contact                                                                                                         |
| (e) germ cell mutagenicity;                | No data available                                                                                                                                                                      |
| (f) carcinogenicity;                       | No data available<br><br>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<br>Solid                                                                                                                                                                |
| 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.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

**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

**12.5. Results of PBT and vPvB assessment** No data available for assessment.

### 12.6. Endocrine disrupting properties

**Endocrine Disruptor Information** This product does not contain any known or suspected endocrine disruptors

# SAFETY DATA SHEET

5-Amino-2-(trifluoromethyl)pyridine

Revision Date 09-Mar-2024

## 12.7. Other adverse 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

**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

**14.1. UN number**

UN2811

**14.2. UN proper shipping name**

Toxic solid, organic, n.o.s.

**Technical Shipping Name**

(5-Amino-2-(trifluoromethyl)pyridine)

**14.3. Transport hazard class(es)**

6.1

**14.4. Packing group**

III

### ADR

**14.1. UN number**

UN2811

**14.2. UN proper shipping name**

Toxic solid, organic, n.o.s.

**Technical Shipping Name**

(5-Amino-2-(trifluoromethyl)pyridine)

**14.3. Transport hazard class(es)**

6.1

**14.4. Packing group**

III

### IATA

**14.1. UN number**

UN2811

**14.2. UN proper shipping name**

TOXIC SOLID, ORGANIC, N.O.S\*

**Technical Shipping Name**

(5-Amino-2-(trifluoromethyl)pyridine)

**14.3. Transport hazard class(es)**

6.1

**14.4. Packing group**

III

**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**



# SAFETY DATA SHEET

5-Amino-2-(trifluoromethyl)pyridine

Revision Date 09-Mar-2024

## 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 |
|-------------------------------------|-------------|--------|--------|-----|-------|------|------|------|------|
| 5-Amino-2-(trifluoromethyl)pyridine | 106877-33-2 | -      | -      | -   | -     | -    | -    | -    | -    |

| Component                           | CAS No      | TSCA | TSCA Inventory notification - Active-Inactive | DSL | NDSL | AICS | NZIoC | PICCS |
|-------------------------------------|-------------|------|-----------------------------------------------|-----|------|------|-------|-------|
| 5-Amino-2-(trifluoromethyl)pyridine | 106877-33-2 | -    | -                                             | -   | -    | -    | -     | -     |

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 (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|-------------------------------------|-------------|---------------------------------------------------------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| 5-Amino-2-(trifluoromethyl)pyridine | 106877-33-2 | -                                                                   | -                                                                             | -                                                                                                     |

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

| 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 |
|-------------------------------------|-------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| 5-Amino-2-(trifluoromethyl)pyridine | 106877-33-2 | 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)?

See table for values

| Component                                                | OECD PFAS | US (EPA) PFAS | EU (ECHA) PFAS | UK (HSE) PFAS | Chemsec PFAS (Sin List) |
|----------------------------------------------------------|-----------|---------------|----------------|---------------|-------------------------|
| 5-Amino-2-(trifluoromethyl)pyridine (CAS #: 106877-33-2) | -         | -             | Listed         | Listed        | -                       |

## PFAS Legend

Listed = Meets the PFAS definition of the named authority

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

# SAFETY DATA SHEET

5-Amino-2-(trifluoromethyl)pyridine

Revision Date 09-Mar-2024

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

H301 - Toxic if swallowed  
H315 - Causes skin irritation  
H317 - May cause an allergic skin reaction  
H319 - Causes serious eye irritation

### Legend

**CAS** - Chemical Abstracts Service

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical 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

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

**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List

**ENCS** - Japanese Existing and New Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**NZIoC** - New Zealand Inventory of Chemicals

**WEL** - Workplace Exposure Limit

**ACGIH** - American Conference of Governmental Industrial Hygienists

**DNEL** - Derived No Effect Level

**RPE** - Respiratory Protective Equipment

**LC50** - Lethal Concentration 50%

**NOEC** - No Observed Effect Concentration

**PBT** - Persistent, Bioaccumulative, Toxic

**TWA** - Time Weighted Average

**IARC** - International Agency for Research on Cancer Predicted No Effect Concentration (PNEC)

**LD50** - Lethal Dose 50%

**EC50** - Effective Concentration 50%

**POW** - Partition coefficient Octanol:Water

**VPvB** - very Persistent, very Bioaccumulative

**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.

**Prepared By**

Health, Safety and Environmental Department

**Revision Date**

09-Mar-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**