

Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**
**Product Identifier**

**Perihalan Produk:** 2-Aminopyridine  
**Product Description:** 2-Aminopyridine  
**Cat No. :** 104540000; 104540025, 104541000; 104545000  
**Synonyms** alpha-Aminopyridine; 1,2-Dihydro-2-iminopyridine; Amino-2-pyridine  
**CAS No** 504-29-0  
**Molecular Formula** C5 H6 N2

**Relevant identified uses of the substance or mixture and uses advised against**

**Recommended Use** Laboratory chemicals.  
**Uses advised against** No Information available

**Company** Thermo Fisher Scientific Fisher Scientific (M) Sdn Bhd  
 Hap Seng Business Park, Lot 01-03, 01-04 Aras 1 Unity Square,  
 No 12, Persiaran Perusahaan, Seksyen 23, 40300 Shah Alam,  
 Selangor Darul Ehsan, Malaysia.  
 Main line: +60 3-5525 7888

**E-mail address** Enquiry.my@thermofisher.com

**Emergency Telephone Number** Tel: +03-5525 7888  
 CHEMTREC Malaysia **1-800-815-308** (Malay)  
 CHEMTREC Malaysia (Kuala Lumpur) **+(60)-327884561** (Malay)

**SECTION 2: HAZARDS IDENTIFICATION**
**Classification of the substance or mixture**

Acute oral toxicity	Category 3 (H301)
Acute dermal toxicity	Category 4 (H312)
Skin Corrosion/Irritation	Category 2 (H315)
Serious Eye Damage/Eye Irritation	Category 2 (H319)
Chronic aquatic toxicity	Category 2 (H411)

**Label Elements**


Signal Word

Danger

# SAFETY DATA SHEET

2-Aminopyridine

Revision Date 21-Mar-2025

## Hazard Statements

H301 - Toxic if swallowed  
H312 - Harmful in contact with skin  
H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H411 - Toxic to aquatic life with long lasting effects

## Precautionary Statements

### Prevention

P264 - Wash face, hands and any exposed skin thoroughly after handling  
P270 - Do not eat, drink or smoke when using this product  
P280 - Wear protective gloves/protective clothing/eye protection/face protection

### Response

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P312 - Call a POISON CENTER or doctor if you feel unwell  
P330 - Rinse mouth  
P362 + P364 - Take off contaminated clothing and wash it before reuse

### Storage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed  
P405 - Store locked up

### Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

## Other Hazards

May form combustible dust concentrations in air

May form explosible dust-air mixture if dispersed

Toxic to terrestrial vertebrates

This product does not contain any known or suspected endocrine disruptors

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight %
2-Aminopyridine	504-29-0	>95

## SECTION 4: FIRST AID MEASURES

### Description of first aid measures

#### General Advice

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

#### Eye Contact

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

#### Skin Contact

Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.

#### Ingestion

Do NOT induce vomiting. Call a physician or poison control center immediately.

#### Inhalation

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

# SAFETY DATA SHEET

2-Aminopyridine

Revision Date 21-Mar-2025

pocket mask equipped with a one-way valve or other proper respiratory medical device.  
Immediate medical attention is required.

**Self-Protection of the First Aider** Use personal protective equipment as required.

**Most important symptoms and effects, both acute and delayed**

None reasonably foreseeable.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** Treat symptomatically.

## SECTION 5: FIREFIGHTING MEASURES

**Extinguishing media**

**Suitable Extinguishing Media**

Water spray, carbon dioxide (CO<sub>2</sub>), dry chemical, alcohol-resistant foam. Water mist may be used to cool closed containers.

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

No information available.

**Special hazards arising from the substance or mixture**

Dust can form an explosive mixture with air. Combustible material. Containers may explode when heated. Fine dust dispersed in air may ignite.

**Hazardous Combustion Products**

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

**Advice for fire-fighters**

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

**Personal Precautions, Protective Equipment and Emergency Procedures**

Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust formation. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas. Remove all sources of ignition. Take precautionary measures against static discharges.

**Environmental precautions**

Do not flush into surface water or sanitary sewer system.

**Methods and Material for Containment and Cleaning Up**

Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Remove all sources of ignition.

**Reference to Other Sections**

Refer to protective measures listed in Sections 8 and 13.

## SECTION 7: HANDLING AND STORAGE

# SAFETY DATA SHEET

2-Aminopyridine

Revision Date 21-Mar-2025

## Precautions for Safe Handling

Do not get in eyes, on skin, or on clothing. Wear personal protective equipment/face protection. 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. Keep away from open flames, hot surfaces and sources of ignition.

## Conditions for Safe Storage, Including any Incompatibilities

Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers. Keep away from heat, sparks and flame.

## Specific End Uses

Use in laboratories.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

Component	Malaysia	ACGIH TLV	OSHA PEL
2-Aminopyridine		TWA: 0.5 ppm	(Vacated) TWA: 0.5 ppm (Vacated) TWA: 2 mg/m <sup>3</sup> TWA: 0.5 ppm TWA: 2 mg/m <sup>3</sup>

Component	European Union	The United Kingdom	Germany
2-Aminopyridine		STEL: 2 ppm 15 min STEL: 7.8 mg/m <sup>3</sup> 15 min TWA: 0.5 ppm 8 hr TWA: 2 mg/m <sup>3</sup> 8 hr	

### 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

#### Hand Protection

Protective gloves

#### 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

#### Recommended Filter type:

Particulates filter conforming to EN 143

To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly

When RPE is used a face piece Fit Test should be conducted

# SAFETY DATA SHEET

2-Aminopyridine

Revision Date 21-Mar-2025

## Hygiene Measures

When using do not eat, drink or smoke Provide regular cleaning of equipment, work area and clothing

## Environmental exposure controls

Prevent product from entering drains Do not allow material to contaminate ground water system

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

**Appearance** Light yellow  
**Physical State** Powder Solid  
**Odor** Slight  
**Odor Threshold** No data available  
**pH** No information available

**Melting Point/Range** 55 - 60 °C / 131 - 140 °F  
**Softening Point** No data available  
**Boiling Point/Range** 204 - 210 °C / 399.2 - 410 °F @ 760 mmHg  
**Flash Point** 92 °C / 197.6 °F **Method -** No information available

**Evaporation Rate** Not applicable Solid  
**Flammability (solid,gas)** No information available  
**Explosion Limits** No data available

**Vapor Pressure** 5 hPa @ 125 °C  
**Vapor Density** Not applicable Solid  
**Specific Gravity / Density** No data available  
**Bulk Density** No data available  
**Water Solubility** Soluble  
**Solubility in other solvents** No information available

### **Partition Coefficient (n-octanol/water)**

**Autoignition Temperature** No data available  
**Decomposition Temperature** No data available  
**Viscosity** Not applicable Solid  
**Explosive Properties** explosive air/vapour mixtures possible  
**Oxidizing Properties** No information available

**Molecular Formula** C5 H6 N2  
**Molecular Weight** 94.12

## SECTION 10: STABILITY AND REACTIVITY

### Reactivity

None known, based on information available.

### Chemical Stability

# SAFETY DATA SHEET

2-Aminopyridine

Revision Date 21-Mar-2025

Stable under recommended storage conditions.

## Possibility of Hazardous Reactions

### **Hazardous Polymerization Hazardous Reactions**

Hazardous polymerization does not occur.  
None under normal processing.

## Conditions to Avoid

Keep away from open flames, hot surfaces and sources of ignition. Incompatible products.

## Incompatible Materials

Acids. Strong oxidizing agents.

## Hazardous Decomposition Products

Nitrogen oxides (NOx). Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

## SECTION 11: TOXICOLOGICAL INFORMATION

### Information on Toxicological Effects

#### Product Information

##### (a) acute toxicity;

Oral

Category 3

Dermal

Category 4

Inhalation

No data available

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
2-Aminopyridine	LD50 = 200 mg/kg ( Rat )	LD50 > 1000 mg/kg ( Rabbit )	-

##### (b) skin corrosion/irritation;

Category 2

##### (c) serious eye damage/irritation;

Category 2

##### (d) respiratory or skin sensitization;

Respiratory

No data available

Skin

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

# SAFETY DATA SHEET

2-Aminopyridine

Revision Date 21-Mar-2025

(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	No information available.
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

**Ecotoxicity effects** Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment.

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
2-Aminopyridine	LC50: = 2.82 mg/L, 96h (Lepomis macrochirus)			EC50 = 248 mg/L 5 min EC50 = 253 mg/L 15 min EC50 = 284 mg/L 30 min

**Persistence and degradability**  
**Persistence** Not readily biodegradable  
**Degradation in sewage treatment plant** Soluble in water, Persistence is unlikely, based on information available.  
Contains substances known to be hazardous to the environment or not degradable in waste water treatment plants.

**Bioaccumulative potential** Bioaccumulation is unlikely

**Mobility in soil** 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.

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

**Other adverse effects** No information available

## SECTION 13: DISPOSAL CONSIDERATIONS

**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.

# SAFETY DATA SHEET

2-Aminopyridine

Revision Date 21-Mar-2025

## Other Information

Do not flush to sewer Waste codes should be assigned by the user based on the application for which the product was used Do not empty into drains Do not let this chemical enter the environment

## SECTION 14: TRANSPORT INFORMATION

### IMDG/IMO

UN-No UN2671  
Hazard Class 6.1  
Packing Group II  
Proper Shipping Name AMINOPYRIDINES

### Road and Rail Transport

UN-No UN2671  
Hazard Class 6.1  
Packing Group II  
Proper Shipping Name AMINOPYRIDINES

### IATA

UN-No UN2671  
Hazard Class 6.1  
Packing Group II  
Proper Shipping Name AMINOPYRIDINES

Special Precautions for User No special precautions required

## SECTION 15: REGULATORY INFORMATION

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

International Inventories X = listed

Component	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	IECSC	AICS	KECL
2-Aminopyridine	207-988-4	X	X	X	X	X	X	X	KE-29925

### National Regulations

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 16: OTHER INFORMATION

### Legend

CAS - Chemical Abstracts Service

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

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

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

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japanese Existing and New Chemical Substances



# SAFETY DATA SHEET

2-Aminopyridine

Revision Date 21-Mar-2025

**IECSC** - Chinese Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated 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  
**RPE** - Respiratory Protective Equipment  
**LC50** - Lethal Concentration 50%  
**POW** - Partition coefficient Octanol:Water

**TWA** - Time Weighted Average  
**IARC** - International Agency for Research on Cancer  
**LD50** - Lethal Dose 50%  
**EC50** - Effective Concentration 50%

**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

**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)

## Key literature references and sources for data

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

**Revision Date** 21-Mar-2025  
**Revision Summary** Not applicable.

**In accordance with local and national regulations: Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013**

## 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**