

Page 1 / 11 Creation Date 19-Oct-2010 Revision Date 09-Jun-2024

Version 6 SDS No. Exempt, SR&D

MOEL's Public Notice No. 2023-9 (Standards for Classification and Labeling of Chemical Substances and Safety Data Sheets)

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

**Product Identifier** 

Product Description: <u>2-Amino-3-bromo-5-methylpyridine</u>

 Cat No. :
 L09570

 CAS No
 17282-00-7

 Molecular Formula
 C6 H7 Br N2

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

Recommended Use Laboratory chemicals.
Uses advised against No Information available

Details of the supplier of the safety data sheet

Importer Supplier

Fisher Scientific Korea Thermo Fisher Scientific Chemicals, Inc.

D5,D6, Incheon Airport Logistics Complex 30 Bond Street

150, Gonghangdong-Ro 296 Beon-Gil Ward Hill, MA 01835-8099

Jung-Gu, Incheon Tel: +82-1661-9555 Fax: +82-2-2023-0603

E-mail address Chem.KR@thermofisher.com

**Emergency Telephone Number** 

Emergency telephone: Medical: +(82) 070-7686-0086 or + 1-703-741-5970

CHEMTREC: 080 822 1374 (Local), CHEMTREC: 1-800-424-9300 or + 1-703-527-3887

Korea: 00-308-13-2549 (24 hours a day, 7 days a week)

## **SECTION 2: HAZARDS IDENTIFICATION**

#### Classification of the substance or mixture

#### Physical hazards

Based on available data, the classification criteria are not met

#### **Health hazards**

Acute Oral Toxicity

Acute Dermal Toxicity

Acute Inhalation Toxicity - Dusts and Mists

Skin Corrosion/Irritation

Serious Eye Damage/Eye Irritation

Specific target organ toxicity - (single exposure)

Category 2

Category 2

Category 2

Category 3

#### **Environmental hazards**

Based on available data, the classification criteria are not met

Revision Date 09-Jun-2024

#### Label Elements



## **Signal Word**

#### Warning

#### **Hazard Statements**

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled

## **Precautionary Statements**

#### Prevention

P264 - Wash hands and face thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P271 - Use only outdoors or in a well-ventilated area

#### Response

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell

P330 - Rinse mouth

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

P312 - Call a POISON CENTER or doctor if you feel unwell

P321 - Specific treatment (see supplemental first aid instructions on this label)

P362 + P364 - Take off contaminated clothing and wash it before reuse

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

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

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical advice/attention

#### 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

This product does not contain any known or suspected endocrine disruptors Toxic to terrestrial vertebrates

NFPA

HealthFlammabilityInstabilityPhysical hazards210N/A

## **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

#### 3.1. Substances

Component	Common Name	CAS No	Index No	Weight %
2-Amino-3-bromo-5-methylpyridine	No information	17282-00-7	Not listed	99 - 100
	available			

Revision Date 09-Jun-2024

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

Description of first aid measures

**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 Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination.

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. Chemical foam.

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

No information available.

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

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

#### **Hazardous Combustion Products**

Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Hydrogen halides, Hydrogen cyanide (hydrocyanic acid), Bromine.

#### Advice for fire-fighters

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, Protective Equipment and Emergency Procedures

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

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#### 2-Amino-3-bromo-5-methylpyridine

#### Environmental precautions

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

### Methods and Material for Containment and Cleaning Up

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

#### Reference to Other Sections

Refer to protective measures listed in Sections 8 and 13.

## **SECTION 7: HANDLING AND STORAGE**

#### Precautions for Safe Handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.

#### Conditions for Safe Storage, Including any Incompatibilities

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

#### Specific End Uses

Use in laboratories.

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### **Control Parameters**

Component	CAS No	Korea	ACGIH TLV	OSHA PEL
2-Amino-3-bromo-5-methylp yridine	17282-00-7	Not listed	Not listed	Not listed

Component	CAS No	European Union	The United Kingdom	Germany
2-Amino-3-bromo-5-methylp	17282-00-7	Not listed	Not listed	Not listed
yridine				

## **ACGIH - Biological Exposure Indices**

ACGITT - Biological Expos	1COIT - Biological Exposure maices						
Component	CAS No	ACGIH - Biological Exposure Indices					
2-Amino-3-bromo-5-methylp vridine	17282-00-7	Not listed					

#### **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**Wear appropriate protective gloves and clothing to prevent skin exposure

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)

Revision Date 09-Jun-2024

#### 2-Amino-3-bromo-5-methylpyridine

Revision Date 09-Jun-2024

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.

Personal protective equipment

**Respiratory Protection** 

Use only those certified by the Korea Occupational Safety and Health Administration.

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

Method - No information available

Solid

and maintained properly

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

Handle in accordance with good industrial hygiene and safety practice **Hygiene Measures** 

**Environmental exposure controls** No information available

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties Appearance (Physical State, Color, Beige Powder Solid

etc.)

Odor No information available **Odor Threshold** No data available No information available Ha

55 - 57 °C / 131 - 134.6 °F **Melting Point/Range** 

**Softening Point** No data available

**Boiling Point/Range** No information available Flash Point No information available

Not applicable Solid **Evaporation Rate** 

Flammability (solid,gas) No information available

No data available **Explosion Limits** 

**Vapor Pressure** No data available Not applicable **Vapor Density** 

No data available Specific Gravity / Density **Bulk Density** No data available

Insoluble **Water Solubility** 

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

and the comment of the control of th					
Component	CAS No	log Pow			
2-Amino-3-bromo-5-methylpyridine	17282-00-7	No data available			

**Autoignition Temperature** No data available **Decomposition Temperature** No data available

Not applicable Solid **Viscosity** 

No information available **Explosive Properties Oxidizing Properties** No information available

#### 2-Amino-3-bromo-5-methylpyridine

Molecular Formula C6 H7 Br N2 Molecular Weight 187.04

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

Reactivity

None known, based on information available

<u>Chemical Stability</u>
Stable under normal conditions.

Possibility of Hazardous Reactions

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

Conditions to Avoid Incompatible products.

Incompatible Materials Strong reducing agents.

**Hazardous Decomposition Products** 

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

Hydrogen cyanide (hydrocyanic acid). Bromine.

## **SECTION 11: TOXICOLOGICAL INFORMATION**

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

#### **Product Information**

Information on expected route of exposure

**Inhalation** Harmful by inhalation. Avoid breathing dust or spray mist.

**Ingestion** May be harmful if swallowed.

**Eyes** Avoid contact with eyes. Irritating to eyes.

**Skin** Avoid contact with skin. May cause irritation. Harmful in contact with skin.

Information on Health Hazards

(a) acute toxicity:

OralCategory 4DermalCategory 4InhalationCategory 4

l	Component	CAS No	LD50 Oral	LD50 Dermal	LC50 Inhalation
	2-Amino-3-bromo-5-methylpyridine	17282-00-7	No data available	No data available	No data available

(b) skin corrosion/irritation; Category 2

(c) serious eye damage/irritation; Category 2

ALFAAL09570

Revision Date 09-Jun-2024

2-Amino-3-bromo-5-methylpyridine

Revision Date 09-Jun-2024

(d) respiratory or skin sensitization;

Respiratory No data available Skin No data available

Component	CAS No	Test method	Test species	Study result
2-Amino-3-bromo-5-methylpyridine	17282-00-7	No data available	No data available	No data available

(e) germ cell mutagenicity; No data available

Component	CAS No	Test method	Test species	Study result
2-Amino-3-bromo-5-methylpyridine	17282-00-7	No data available	No data available	No data available

(f) carcinogenicity; No data available

Component	CAS No	Test method	Test species / Duration	Study result
2-Amino-3-bromo-5-methylpyridine	17282-00-7	No data available	No data available	No data available

There are no known carcinogenic chemicals in this product

Component	CAS No	IARC	NTP	ACGIH	OSHA	UK
2-Amino-3-bromo-5-m	17282-00-7	Not listed				
ethylpyridine						

(g) reproductive toxicity; No data available

Component	CAS No	Test method	Test species / Duration	Study result
2-Amino-3-bromo-5-methylpyridine	17282-00-7	No data available	No data available	No data available

(h) STOT-single exposure; Category 3

Results / Target organs Respiratory system.

(i) STOT-repeated exposure; No data available

Target Organs None known.

(j) aspiration hazard; Not applicable

Solid

**Other Adverse Effects** 

No information available.

Component	CAS No	EU - Endocrine Disrupters Candidate	EU - Endocrine Disruptors - Evaluated	Japan - Endocrine Disruptor Information
		List	Substances	•
2-Amino-3-bromo-5-methylpyridine	17282-00-7	Not applicable	Not applicable	Not applicable

# **SECTION 12: ECOLOGICAL INFORMATION**

**Ecotoxicity effects** Do not empty into drains.

Component	CAS No	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
2-Amino-3-bromo-5-methylpyridine	17282-00-7	No data available	No data available	No data available	No data available

Persistence and degradability

Persistence Insoluble in water.

#### 2-Amino-3-bromo-5-methylpyridine

<u>Bioaccumulative potential</u> May have some potential to bioaccumulate

Mobility in soil Spillage unlikely to penetrate soil Is not likely mobile in the environment due its low water

solubility.

**Ozone Depletion Potential** 

Component	CAS No	Ozone Depletion Potential
2-Amino-3-bromo-5-methylpyridine	17282-00-7	Not listed

Other adverse effects No information available

## **SECTION 13: DISPOSAL CONSIDERATIONS**

Waste treatment methods

Waste from Residues/Unused

**Products** 

Waste is classified as hazardous. Dispose in accordance with the Wastes Control Act

Revision Date 09-Jun-2024

Page 8/11

(폐기물관리법).

**Contaminated Packaging** Dispose of this container to hazardous or special waste collection point.

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**

Road and Rail Transport

<u>IATA</u> Not regulated

IMDG/IMO Not regulated

Marine Pollutant No hazards identified

Special Precautions for User No special precautions required

#### **SECTION 15: REGULATORY INFORMATION**

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

Legend: X - Listed '-' - Not Listed

#### **International Inventories**

Component	CAS No	KECL	TSCA	EINECS	IECSC	DSL	NDSL	PICCS	ENCS	ISHL	AICS
2-Amino-3-bromo-5-methylp	17282-00-7	-	-	-	-	-	-	-	-		-
vridine											

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	(2012/18/EC) -	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
2-Amino-3-bromo-5-methylpyr idine	17282-00-7	Not applicable	Not applicable	Not applicable	Not applicable

Component	CAS No	OECD HPV	Persistent Organic	Ozone Depletion
			Pollutant	Potential

## 2-Amino-3-bromo-5-methylpyridine

Revision Date 09-Jun-2024

2-Amino-3-bromo-5-meth	nylpyridine	17282-00-7	Not ap	plicable	Not applicable	е	Not	applicable	
Korean National Regu	<u>ulations</u>								
Component		CAS No	Evaluation	jistration and of Chemical s (K-REACH)	Authorised Chem	nicals		g Substances to Registration	
2-Amino-3-bromo-5-meth	nylpyridine	17282-00-7		plicable	Not applicable	е	Not	applicable	
Component		CAS No		Control Act - hemicals	Chemical Control Act - Prohibited Chemicals		Chemical Control Act - Use Restricted Chemicals		
2-Amino-3-bromo-5-meth	nylpyridine	17282-00-7	Not ap	plicable	Not applicable	е		applicable	
Component		CAS No	Accident Chemic	Control Act - Precaution cals (% in tures)	Accident Precaution Chemicals - Quantity limits Storage (% in		caution Accident Precaution (% in Chemicals - Quantity Iimits Storage (% in limits Manuf		al Control Act ent Precaution cals - Quantity anufacture/Us n mixtures)
2-Amino-3-bromo-5-meth	nylpyridine	17282-00-7	Not an	plicable	mixtures) Not applicable	e		applicable	
Component		CAS No	Waste Co	ontrol Law	Ministry of Environment CMR risk		-Ministry of Environment Critically Controlled Substance		
2-Amino-3-bromo-5-meth	vlovridine	17282-00-7	Not an	plicable	Not applicable			applicable	
			Environme	t to Work nt Monitoring	substances			ng permission	
2-Amino-3-bromo-5-meth	nylpyridine	17282-00-7	Not ap	pplicable	Not applicable	е	Not	applicable	
Component		CAS No		ubstances to control	ISHA - Harmful A Requiring Hea Examination	lth	_	- Permissible osure Limits	
2-Amino-3-bromo-5-meth	nylpyridine	17282-00-7	Not ap	plicable	Not applicable	е	Not	applicable	
Component		CAS No	Process Sa	Subject to afety Reports m quantity)	ISHA - Threshold Values (TLVs) Che	-		A - Special ment materials	
2-Amino-3-bromo-5-meth	nylpyridine	17282-00-7		pplicable	Not applicable	е	Not	applicable	
National Fire Associa	tion - Dangei CAS No	Class 1 - Oxidising solids	S Minimum qua Class 2 - Flammable solid	Class 3 - Spontaneous Combustible Substances and Dangero Substances	Class 4 - Flammable e liquids	Self-	ess 5 - reactive stances	Class 6 - Oxidising liquids	
2-Amino-3-bromo-5-met	17282-00-7	Not applicable	Not applicable	When Wet  Not applicabl		Not a	pplicable	Not applicabl	

## **Control Parameters**

hylpyridine

Component	CAS No	Korea	ACGIH - Biological Exposure Indices
2-Amino-3-bromo-5-methylpyridine	17282-00-7	Not listed	Not listed

## **US Management Information**

OSHA - Occupational Safety and Health Administration

#### 2-Amino-3-bromo-5-methylpyridine

2-Amino-3-bromo-5-methylpyridine

Revision Date 09-Jun-2024

Not applicable

Not applicable			
Component	CAS No	Specifically Regulated	Highly Hazardous Chemicals
		Chemicals	

**CERCLA** Not applicable

Component	CAS No	CERCLA Extremely Hazardous Substances RQs	Hazardous Substances RQs	SARA 313 - Threshold Values %
2-Amino-3-bromo-5-methylpyridine	17282-00-7	Not applicable	Not applicable	Not applicable

#### GHS Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

17282-00-7

Warning.

H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled. H315 - Causes skin irritation. H319 - Causes serious eye irritation. H335 - May cause respiratory irritation.

P280 - Wear protective gloves/protective clothing/eye protection/face protection. P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P302 + P352 - IF ON SKIN: Wash with plenty of soap and water. P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. 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 vou feel unwell.

## **SECTION 16: OTHER INFORMATION**

#### Legend

Inventory

Substances List

**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

**IECSC** - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

WEL - Workplace Exposure Limit

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

RPE - Respiratory Protective Equipment

LC50 - Lethal Concentration 50%

POW - Partition coefficient Octanol:Water

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

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

Not applicable

AICS - Australian Inventory of Chemical Substances

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

NZIoC - New Zealand Inventory of Chemicals

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50%

ICAO/IATA - International Civil Aviation Organization/International Air **Transport Association** 

MARPOL - International Convention for the Prevention of Pollution from Shins

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

#### **Training Advice**

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

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

#### 2-Amino-3-bromo-5-methylpyridine

Prepared By Health, Safety and Environmental Department

Creation Date 19-Oct-2010 Revision Date 19-Oct-2024

Revision Number 6

**Revision Summary** New emergency telephone response service provider.

# MOEL's Public Notice No. 2023-9 (Standards for Classification and Labeling of Chemical Substances and Safety Data Sheets)

#### **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** 

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Revision Date 09-Jun-2024