

SAFETY DATA SHEET

Creation Date 04-Jan-2010

Revision Date 14-Feb-2020

Revision Number 2

1. Identification

Product Name 4-(Dimethylamino)pyridine

Cat No. : H51715

CAS-No 1122-58-3

Synonyms DMAP, N,N-dimethyl-4-pyridylamine

Recommended Use Laboratory chemicals.

Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Alfa Aesar

Thermo Fisher Scientific Chemicals, Inc.

30 Bond Street

Ward Hill, MA 01835-8099

Tel: 800-343-0660 Fax: 800-322-4757 **Email:** tech@alfa.com

www.alfa.com

Emergency Telephone Number

During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660.

After normal business hours, call Carechem 24 at (866) 928-0789.

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

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 1

Specific target organ toxicity (single exposure)

Target Organs - Central nervous system (CNS).

Label Elements

Signal Word

Danger

Hazard Statements

Fatal in contact with skin Causes skin irritation

Causes serious eye damage Causes damage to organs Toxic if swallowed or if inhaled



Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Do not get in eyes, on skin, or on clothing

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

Use only outdoors or in a well-ventilated area Do not breathe dust/fume/gas/mist/vapors/spray

Response

IF exposed: Call a POISON CENTER or doctor/physician

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician

Skin

Immediately call a POISON CENTER or doctor/physician

IF ON SKIN: Gently wash with plenty of soap and water

Remove/Take off immediately all contaminated clothing

Wash contaminated clothing before reuse

If skin irritation occurs: Get medical advice/attention

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Rinse mouth

Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Toxic to aquatic life with long lasting effects

3. Composition/Information on Ingredients

Component	CAS-No	Weight %
4-Pyridinamine, N,N-dimethyl-	1122-58-3	>95

4. 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. Rinse immediately with plenty of water, also under the eyelids, for at least 15

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minutes.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Immediate medical

attention is required.

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

Immediate medical attention is required.

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

Most important symptoms and

effects

None reasonably foreseeable, Causes severe eye damage. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe

damage to the delicate tissue and danger of perforation

Notes to Physician Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

Unsuitable Extinguishing Media No information available

Flash Point 124 °C / 255 °F

Method - CC (closed cup)

Autoignition Temperature 420 °C / 788 °F

Explosion Limits

Upper No data available
Lower No data available
Oxidizing Properties Not oxidising

Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Very toxic, Corrosive material, Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Carbon monoxide (CO). Carbon dioxide (CO2). Nitrogen oxides (NOx).

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

NFPA

HealthFlammabilityInstabilityPhysical hazards310N/A

6. Accidental release measures

Personal Precautions 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.

Environmental Precautions Do not flush into surface water or sanitary sewer system.

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

Up

7. Handling and storage

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.

Storage

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

8. Exposure controls / personal protection

Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure

limitsestablished by the region specific regulatory bodies.

Engineering Measures

Use only under a chemical fume hood. Ensure that eyewash stations and safety showers

are close to the workstation location.

Personal Protective Equipment

Eye/face Protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Solid

Physical State Appearance Odor

White Strong Odor Threshold No information available

рΗ Melting Point/Range

11.4 10% aq. sol 110 - 113 °C / 230 - 235 °F

Boiling Point/Range Flash Point

162 °C / 324 °F @ 50 mmHg 124 °C / 255 °F

Method -Evaporation Rate

CC (closed cup) Not applicable

Flammability (solid,gas)

No information available

Flammability or explosive limits

Upper No data available Lower No data available Vapor Pressure negligible Vapor Density Not applicable

Specific Gravity Solubility

No information available

Partition coefficient; n-octanol/water

Soluble in water No data available 420 °C / 788 °F

Autoignition Temperature **Decomposition Temperature**

No information available Not applicable

Viscosity Molecular Formula Molecular Weight

C7 H10 N2 122.17

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10. Stability and reactivity

None known, based on information available Reactive Hazard

Stable under normal conditions. Stability

Incompatible products, Excess heat, Avoid dust formation, **Conditions to Avoid**

Strong oxidizing agents Incompatible Materials

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO₂), Nitrogen oxides (NOx)

Hazardous polymerization does not occur-**Hazardous Polymerization**

None under normal processing. **Hazardous Reactions**

11. Toxicological information

Acute Toxicity

Product Information

Component Information

Component	LD50 Oral	LD50 Dermai	LC50 Inhalation
4-Pyridinamine, N,N-dimethyl-	140 mg/kg (Rat)	90 mg/kg (Rabbit)	0.53 mg/L/4h (Rat)
Toxicologically Synergistic	No information available		

Toxicologically Synergistic

Products

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Causes burns by all exposure routes Irritation

No information available Sensitization

The table below indicates whether each agency has listed any ingredient as a carcinogen. Carcinogenicity

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
4-Pyridinamine,	1122-58-3	Not listed				
N N-dimethyl-		l	1			

No information available **Mutagenic Effects**

No information available. Reproductive Effects

No information available. **Developmental Effects**

No information available. **Teratogenicity**

Central nervous system (CNS) STOT - single exposure

None known STOT - repeated exposure

No information available Aspiration hazard

Symptoms / effects,both acute and

delayed

Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes

severe swelling, severe damage to the delicate tissue and danger of perforation

No information available **Endocrine Disruptor Information**

The toxicological properties have not been fully investigated. Other Adverse Effects

12. Ecological Information

Ecotoxicity

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 Algae	Freshwater Fish	Microtox	Water Flea
4-Pyridinamine,	EC50 = 1.82-4.22 mg/L 72h	LC50 = 11.9 mg/L 96h	Not listed	Not listed
N,N-dimethyl-		(Zebra fish)		

Persistence and Degradability

Soluble in water Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation

No information available.

Mobility

. Will likely be mobile in the environment due to its water solubility.

Component	log Pow	
4-Pyridinamine, N,N-dimethyl-	1.34	

13. Disposal considerations

Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT

UN-No UN2811

Proper Shipping Name Toxic solid, organic, n.o.s. **Technical Name** 4-Pyridinamine, N,N-dimethyl-

Hazard Class 6.1 **Packing Group** Ш

TDG

UN-No UN2811

Proper Shipping Name Toxic solid, organic, n.o.s.

Hazard Class 6.1 **Packing Group**

IATA

UN-No UN2811

Proper Shipping Name Toxic solid, organic, n.o.s.

Hazard Class 6.1 **Packing Group**

IMDG/IMO

UN-No UN2811

Proper Shipping Name Toxic solid, organic, n.o.s.

Hazard Class 6.1 **Packing Group** Ш

15. Regulatory Information

United States of America Inventory

Component	CAS-No	TSCA	TSCA Inventory notification - Active/Inactive	TSCA - EPA Regulatory Flags
4-Pyridinamine, N,N-dimethyl-	1122-58-3	Х	ACTIVE	1 lags

Legend:

TSCA - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed '-' - Not Listed

TSCA 12(b) - Notices of Export

Not applicable

International Inventories

4-(Dimethylamino)pyridine

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL).

Component	CAS-No	DSL	NDSL	EINECS	PICCS	ENCS	AICS	IECSC	KECL
4-Pyridinamine, N,N-dimethyl-	1122-58-3	Х		214-353-5	Х	Х	Х	Х	KE-11197

U.S. Federal Regulations

SARA 313

Not applicable

SARA 311/312 Hazard Categories

See section 2 for more information

CWA (Clean Water Act)

Not applicable

Clean Air Act

Not applicable

OSHA - Occupational Safety and

Not applicable

Health Administration

Health Administration

Not applicable

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know

Regulations

CERCLA

Not applicable

U.S. Department of Transportation

Reportable Quantity (RQ):

N

DOT Marine Pollutant
DOT Severe Marine Pollutant

N N

U.S. Department of Homeland

Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade

Slight risk, Grade 1

16. Other information

Prepared By

Health, Safety and Environmental Department

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www.alfa.com

Creation Date

04-Jan-2010

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14-Feb-2020 14-Feb-2020

Print Date Revision Summary

SDS authoring systems update, replaces ChemGes SDS No. 1122-58-3.

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 SDS