

# **SAFETY DATA SHEET**

Creation Date 04-Jan-2010 Revision Date 06-Mar-2018 Revision Number 1

## 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 Not for 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

Category 2

Acute Inhalation Toxicity - Dusts and Mists

Category 3

Skin Corrosion/irritation

Serious Eye Damage/Eye Irritation

Specific target organ toxicity (single exposure)

Target Organs - Central nervous system.

## Label Elements

## **Signal Word**

Danger

#### **Hazard Statements**

Toxic if swallowed
Fatal in contact with skin
Causes skin irritation
Causes serious eye damage
Toxic if inhaled

#### Causes damage to organs



#### **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

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

#### **Eves**

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.

In the case of contact with eyes, rinse immediately with plenty of water and seek medical **Eye Contact** 

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

minutes.

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

attention is required.

**Inhalation** Move 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 Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable Extinguishing Media No information available

**Flash Point** 124 °C / 255 °F

Method - Closed cup

Autoignition Temperature 420 °C / 788 °F

**Explosion Limits** 

Upper No data available
Lower No data available
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

Health	Flammability	Instability	Physical hazards
3	1	0	N/A

#### 6. Accidental release measures

Personal Precautions Ensure adequate ventilation. Use personal protective equipment. 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 or vacuum up spillage and collect in suitable container for disposal. Avoid dust **Up** formation.

## 7. Handling and storage

Handling Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Avoid dust

formation. Use only under a chemical fume hood. Do not breathe vapors/dust. Do not

ingest.

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

**Eve/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** Long sleeved clothing.

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

Physical State Solid
Appearance White
Odor Strong

Odor Threshold No information available

**pH** 9.7 10% aq. sol

 Melting Point/Range
 110 - 113 °C / 230 - 235 °F

 Boiling Point/Range
 162 °C / 324 °F @ 50 mmHg

Flash Point 124 °C / 255 °F
Method - Closed cup
Evaporation Rate Not applicable

Flammability (solid, gas)

No information available

Flammability or explosive limits

Upper No data available
Lower No data available
Vapor Pressure negligible

Vapor DensityNot applicableSpecific GravityNo information available

Solubility

Partition coefficient; n-octanol/water

Autoignition Temperature

Decomposition Temperature

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

ViscosityNot applicableMolecular FormulaC7 H10 N2Molecular Weight122.17

## 10. Stability and reactivity

Reactive Hazard None known, based on information available

**Stability** Stable under normal conditions.

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

**Incompatible Materials** Strong oxidizing agents

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

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

#### **Acute Toxicity**

## **Product Information**

**Component Information** 

Component	Component LD50 Oral		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

**Products** 

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

Irritation Causes burns by all exposure routes

Sensitization No information available

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

Component			CAS-No IARC NTP		ACGIH	OSHA	Mexico Not listed	
4-Pyridinamine,			Not listed	Not listed	Not listed			
N,N-dimethyl-								

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

No information available. **Teratogenicity** 

STOT - single exposure Central nervous system

None known STOT - repeated exposure

**Aspiration hazard** No information available

delayed

Symptoms / effects,both acute and 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

**Endocrine Disruptor Information** No information available

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)		

Soluble in water Persistence is unlikely based on information available. Persistence and Degradability

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**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
Proper technical name
Toxic solid, organic, n.o.s
4-Pyridinamine, N,N-dimethyl-

Hazard Class 6.1 Packing Group

**TDG** 

UN-No UN2811

Proper Shipping Name TOXIC SOLID, ORGANIC, N.O.S.

Hazard Class 6. Packing Group

<u>IATA</u>

UN-No UN2811

Proper Shipping Name TOXIC SOLID, ORGANIC, N.O.S.

Hazard Class 6.1 Packing Group II

IMDG/IMO

UN-No UN2811

Proper Shipping Name TOXIC SOLID, ORGANIC, N.O.S.

Hazard Class 6.1 Packing Group II

# 15. Regulatory information

All of the components in the product are on the following Inventory lists: X = listed

#### **International Inventories**

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
4-Pyridinamine,	Х	Х	-	214-353-5	-		Х	Χ	Χ	Х	Χ
N,N-dimethyl-											

#### Legend:

- X Listed
- E Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
- F Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
- N Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
- P Indicates a commenced PMN substance
- R Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
- S Indicates a substance that is identified in a proposed or final Significant New Use Rule
- T Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).

- Y1 Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
- Y2 Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

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## **U.S. Federal Regulations**

TSCA 12(b) Not applicable

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 Health Administration

Not applicable

CERCLA Not applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know

Regulations

Not applicable

#### **U.S. Department of Transportation**

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant 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

Email: tech@alfa.com

www.alfa.com

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**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**