

## Material Safety Data Sheet

Version 4.0

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## 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : 4-(Dimethylamino)pyridine

Product Number : 107700

Brand : Aldrich

Company : Sigma-Aldrich Canada, Ltd  
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CANADA

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## 2. HAZARDS IDENTIFICATION

## Emergency Overview

## WHMIS Classification

D1A	Very Toxic Material Causing Immediate and	Highly toxic by skin absorption
D2B	Serious Toxic Effects	Moderate skin irritant
		Moderate eye irritant

## GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)

H301	Toxic if swallowed.
H310	Fatal in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Precautionary statement(s)

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing.
P302 + P350	IF ON SKIN: Gently 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.
P310	Immediately call a POISON CENTER or doctor/physician.

## HMIS Classification

Health hazard:	4
Flammability:	0
Physical hazards:	0

## Potential Health Effects

Inhalation	May be harmful if inhaled. Causes respiratory tract irritation.
Skin	Causes skin irritation. May be fatal if absorbed through skin.
Eyes	Causes eye irritation.
Ingestion	Toxic if swallowed.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : DMAP  
Formula :  $C_7H_{10}N_2$   
Molecular Weight : 122.17 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
<b>N,N-Dimethylpyridin-4-amine</b>			
1122-58-3	214-353-5	-	-

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### 4. FIRST AID MEASURES

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

If breathed in, move person into fresh air. If not breathing give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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### 5. FIRE-FIGHTING MEASURES

#### Suitable extinguishing media

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

#### Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

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### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Evacuate personnel to safe areas.

#### Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

#### Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

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### 7. HANDLING AND STORAGE

#### Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

#### Conditions for safe storage

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

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

### Personal protective equipment

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

Handle with gloves.

#### Eye protection

Face shield and safety glasses

#### Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

#### Hygiene measures

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form	crystalline
Colour	beige

### Safety data

pH	no data available
Melting point	108 - 110 °C (226 - 230 °F) - lit.
Boiling point	162 °C (324 °F) at 67 hPa (50 mmHg)
Flash point	110 °C (230 °F) - closed cup
Ignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Vapour pressure	0.169 hPa (0.127 mmHg) at 25 °C (77 °F)
Water solubility	76 g/l at 20 °C (68 °F)
Partition coefficient: n-octanol/water	log Pow: 1.34

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## 10. STABILITY AND REACTIVITY

### Chemical stability

Stable under recommended storage conditions.

### Conditions to avoid

no data available

### Materials to avoid

acids, Oxidizing agents

### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx), Hydrogen cyanide (hydrocyanic acid)

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## 11. TOXICOLOGICAL INFORMATION

**Acute toxicity**

LD50 Oral - rat - 140 mg/kg

LD50 Dermal - guinea pig - 100 - 200 mg/kg

**Skin corrosion/irritation**

no data available

**Serious eye damage/eye irritation**

no data available

**Respiratory or skin sensitization**

no data available

**Germ cell mutagenicity**

no data available

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**Reproductive toxicity**

no data available

**Specific target organ toxicity - single exposure (GHS)**

Inhalation - May cause respiratory irritation.

**Specific target organ toxicity - repeated exposure (GHS)**

no data available

**Aspiration hazard**

no data available

**Potential health effects**

<b>Inhalation</b>	May be harmful if inhaled. Causes respiratory tract irritation.
<b>Ingestion</b>	Toxic if swallowed.
<b>Skin</b>	Causes skin irritation. May be fatal if absorbed through skin.
<b>Eyes</b>	Causes eye irritation.

**Signs and Symptoms of Exposure**

Weakness, Convulsions

**Additional Information**

RTECS: US9230000

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**12. ECOLOGICAL INFORMATION****Toxicity**

Toxicity to fish	LC50 - Danio rerio (zebra fish) - 11.6 mg/l - 96 h NOEC - Danio rerio (zebra fish) - 5 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates.	- Daphnia magna (Water flea) - > 100 mg/l - 48 h
Toxicity to algae	EC50 - Pseudokirchneriella subcapitata (green algae) - 1.82 - 4.22 mg/l - 72 h NOEC - Pseudokirchneriella subcapitata (green algae) - 0.4 mg/l - 72 h

**Persistence and degradability**

no data available

**Bioaccumulative potential**

no data available

**Mobility in soil**

no data available

**PBT and vPvB assessment**

no data available

**Other adverse effects**

no data available

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**13. DISPOSAL CONSIDERATIONS****Product**

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**

Dispose of as unused product.

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**14. TRANSPORT INFORMATION****DOT (US)**

UN-Number: 2811    Class: 6.1    Packing group: I  
Proper shipping name: Toxic solids, organic, n.o.s. (N,N-Dimethylpyridin-4-amine)  
Marine pollutant: No  
Poison Inhalation Hazard: No

**IMDG**

UN-Number: 2811    Class: 6.1    Packing group: I    EMS-No: F-A, S-A  
Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (N,N-Dimethylpyridin-4-amine)  
Marine pollutant: No

**IATA**

UN-Number: 2811    Class: 6.1    Packing group: I  
Proper shipping name: Toxic solid, organic, n.o.s. (N,N-Dimethylpyridin-4-amine)

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**15. REGULATORY INFORMATION****DSL Status**

All components of this product are on the Canadian DSL list.

**WHMIS Classification**

D1A	Very Toxic Material Causing Immediate and	Highly toxic by skin absorption
D2B	Serious Toxic Effects	Moderate skin irritant
		Moderate eye irritant

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**16. OTHER INFORMATION****Further information**

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