1. PRODUCT AND COMPANY IDENTIFICATION

Product name: 4-(Dimethylamino)pyridine
Product Number: 107700
Brand: Aldrich
Supplier: Sigma-Aldrich Corporation
3050 Spruce Street
SAINT LOUIS MO 63103 USA
Telephone: +1 800-325-5832
Fax: +1 800-325-5052
Emergency Phone # (For both supplier and manufacturer): (314) 776-6555
Preparation Information: Sigma-Aldrich Corporation
Product Safety - Americas Region
1-800-521-8956

2. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards
Toxic by ingestion, Highly toxic by skin absorption, Irritant

GHS Classification
Acute toxicity, Oral (Category 3)
Acute toxicity, Dermal (Category 1)
Skin irritation (Category 2)
Eye irritation (Category 2A)
Specific target organ toxicity - single exposure (Category 3)

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

NFPA Rating  
Health hazard: 4  
Fire: 0  
Reactivity Hazard: 0

Health hazard: 4  
Fire: 1  
Reactivity Hazard: 0

Potential Health Effects  
Inhalation  May be harmful if inhaled. Causes respiratory tract irritation.  
Skin  May be fatal if absorbed through skin. Causes skin irritation.  
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

<table>
<thead>
<tr>
<th>Component</th>
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<tr>
<td>N,N-Dimethylypyridin-4-amine</td>
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<tr>
<td>CAS-No.</td>
<td>1122-58-3</td>
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<tr>
<td>EC-No.</td>
<td>214-353-5</td>
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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.

5. FIREFIGHTING MEASURES  
Conditions of flammability  
Not flammable or combustible.

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

Special protective equipment for firefighters  
Wear self contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products  
Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)

6. ACCIDENTAL RELEASE MEASURES
**Personal precautions**
Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

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

### 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.

**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. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Eye protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin and body protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

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

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance**
- **Form**: crystalline
- **Colour**: beige

**Safety data**
- **pH**: no data available
- **Melting point/freezing point**: Melting point/range: 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
- **Autoignition**: 420 °C (788 °F)
10. STABILITY AND REACTIVITY

**Chemical stability**
Stable under recommended storage conditions.

**Possibility of hazardous reactions**
no data available

**Conditions to avoid**
no data available

**Materials to avoid**
acids, Oxidizing agents

**Hazardous decomposition products**
Other decomposition products - no data available
Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)

11. TOXICOLOGICAL INFORMATION

**Acute toxicity**

**Oral LD50**
LD50 Oral - rat - 140 mg/kg

**Inhalation LC50**
no data available

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

**Other information on acute toxicity**
no data available

**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.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

no data available

Teratogenicity

no data available

Specific target organ toxicity - single exposure (Globally Harmonized System)
Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure (Globally Harmonized System)
no data available

Aspiration hazard
no data available

Potential health effects

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

Signs and Symptoms of Exposure
Weakness, Convulsions

Synergistic effects
no data available

Additional Information
RTECS: US9230000

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
13. DISPOSAL CONSIDERATIONS

Product
Offer surplus and non-recyclable solutions to a licensed disposal company. 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.

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)
Reportable Quantity (RQ):
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)

15. REGULATORY INFORMATION

OSHA Hazards
Toxic by ingestion, Highly toxic by skin absorption, Irritant

SARA 302 Components
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards
Acute Health Hazard

Massachusetts Right To Know Components
No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

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New Jersey Right To Know Components

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California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

Further information
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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a
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