# SAFETY DATA SHEET

Version 4.2 Revision Date 10/13/2016 Print Date 11/20/2018

#### 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name : 2,4-Dichloropyridine

Product Number : 636584 Brand : Aldrich

CAS-No. : 26452-80-2

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

Identified uses : Laboratory chemicals, Synthesis of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich

3050 Spruce Street SAINT LOUIS MO 63103

**USA** 

Telephone : +1 800-325-5832 Fax : +1 800-325-5052

1.4 Emergency telephone number

Emergency Phone # : +1-703-527-3887 (CHEMTREC)

### 2. HAZARDS IDENTIFICATION

# 2.1 Classification of the substance or mixture

# GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 4), H227 Acute toxicity, Oral (Category 4), H302 Skin irritation (Category 2), H315 Serious eye damage (Category 1), H318 Skin sensitisation (Category 1), H317

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)

H227 Combustible liquid. H302 Harmful if swallowed. H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H318 Causes serious eye damage.

Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.

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P270 Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. P272 Wear protective gloves/ protective clothing/ eye protection/ face P280 protection. P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. P302 + P352 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/doctor. P321 Specific treatment (see supplemental first aid instructions on this label). P330 Rinse mouth. P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention. P362 Take off contaminated clothing and wash before reuse. P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for

P403 + P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/ container to an approved waste disposal plant.

#### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

Formula : C<sub>5</sub>H<sub>3</sub>Cl<sub>2</sub>N Molecular weight : 147.99 g/mol CAS-No. : 26452-80-2 EC-No. : 247-717-7

#### Hazardous components

Component	Classification	Concentration
2,4-Dichloropyridine		
	Flam. Liq. 4; Acute Tox. 4;	<= 100 %
	Skin Irrit. 2; Eye Dam. 1; Skin	
	Sens. 1; H227, H302, H315,	
	H317, H318	

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### 4. FIRST AID MEASURES

# 4.1 Description of 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. 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

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

#### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

#### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

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#### 5. FIREFIGHTING MEASURES

## 5.1 Extinguishing media

#### Suitable extinguishing media

For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

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

No data available

#### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 5.4 Further information

Use water spray to cool unopened containers.

#### 6. ACCIDENTAL RELEASE MEASURES

#### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

For personal protection see section 8.

#### 6.2 Environmental precautions

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

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

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

For disposal see section 13.

# 7. HANDLING AND STORAGE

# 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. For precautions see section 2.2.

# 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

# 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

# 8.2 Exposure controls

### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

# Personal protective equipment

#### Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

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#### Skin 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.

#### **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.

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) 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).

#### Control of environmental exposure

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

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties

Form: liquid a) Appearance

Colour: colourless

b) Odour No data available

Odour Threshold No data available

d) No data available

e) Melting point/freezing

point

No data available

Initial boiling point and

boiling range

76 - 78 °C (169 - 172 °F) at 31 hPa (23 mmHg) - lit.

189 - 190 °C (372 - 374 °F) - lit.

g) Flash point 89 °C (192 °F) - closed cup

h) Evaporation rate No data available

i) Flammability (solid, gas) No data available Upper/lower No data available j)

flammability or explosive limits

k) Vapour pressure No data available Vapour density No data available

m) Relative density 1.370 g/cm3 at 25 °C (77 °F)

n) Water solubility No data available Partition coefficient: n-

octanol/water

log Pow: 2.353

**Auto-ignition** No data available temperature

Decomposition temperature

No data available

No data available Viscosity No data available s) Explosive properties No data available t) Oxidizing properties

#### 9.2 Other safety information

No data available

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#### 10. STABILITY AND REACTIVITY

#### 10.1 Reactivity

No data available

# 10.2 Chemical stability

Stable under recommended storage conditions.

#### 10.3 Possibility of hazardous reactions

No data available

#### 10.4 Conditions to avoid

Heat, flames and sparks.

#### 10.5 Incompatible materials

Strong oxidizing agents

#### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas

Other decomposition products - No data available

In the event of fire: see section 5

#### 11. TOXICOLOGICAL INFORMATION

# 11.1 Information on toxicological effects

#### **Acute toxicity**

No data available

Inhalation: No data available

Dermal: No data available

No data available

# Skin corrosion/irritation

No data available

# Serious eye damage/eye irritation

No data available

# Respiratory or skin sensitisation

# 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

No data available

#### Specific target organ toxicity - single exposure

No data available

# Specific target organ toxicity - repeated exposure

No data available

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#### **Aspiration hazard**

No data available

#### **Additional Information**

RTECS: NC3410400

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

#### 12. ECOLOGICAL INFORMATION

#### 12.1 Toxicity

No data available

# 12.2 Persistence and degradability

No data available

# 12.3 Bioaccumulative potential

No data available

#### 12.4 Mobility in soil

No data available

#### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

#### 12.6 Other adverse effects

No data available

## 13. DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

#### **Product**

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

#### Contaminated packaging

Dispose of as unused product.

#### 14. TRANSPORT INFORMATION

# DOT (US)

Not dangerous goods

## **IMDG**

Not dangerous goods

#### IATA

Not dangerous goods

#### 15. REGULATORY INFORMATION

# **SARA 302 Components**

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

# **SARA 313 Components**

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

Fire Hazard, 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** 

CAS-No. Revision Date

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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**

# Full text of H-Statements referred to under sections 2 and 3.

Acute Tox. Acute toxicity
Eye Dam. Serious eye damage
Flam. Liq. Flammable liquids
H227 Combustible liquid.
H302 Harmful if swallowed.
H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H318 Causes serious eye damage.

Skin Irrit. Skin irritation

**HMIS Rating** 

Health hazard: 2
Chronic Health Hazard:
Flammability: 2
Physical Hazard 0

**NFPA Rating** 

Health hazard: 2
Fire Hazard: 2
Reactivity Hazard: 0

# **Further information**

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# **Preparation Information**

Sigma-Aldrich Corporation Product Safety – Americas Region 1-800-521-8956

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