sigma-aldrich.com SAFETY DATA SHEET Version 6.0

Revision Date 05/28/2017 Print Date 11/16/2018

#### 1. PRODUCT AND COMPANY IDENTIFICATION 1.1 **Product identifiers** Product name 1 2,4-Dichloropyrimidine-5-carbonyl chloride Product Number 728772 Brand Aldrich CAS-No. 2972-52-3 • 1.2 Relevant identified uses of the substance or mixture and uses advised against Identified uses : Laboratory chemicals, Synthesis of substances Details of the supplier of the safety data sheet 1.3 Company Sigma-Aldrich Inc. 3050 Spruce Street ST. LOUIS MO 63103 UNITED STATES Telephone +1 314 771-5765 +1 800 325-5052 Fax

#### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

# 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

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

Acute toxicity, Oral (Category 4), H302 Acute toxicity, Inhalation (Category 4), H332 Acute toxicity, Dermal (Category 4), H312 Skin corrosion (Category 1B), H314 Serious eye damage (Category 1), H318

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) H302 + H312 + H332 H314 Precautionary statement(s) P261 P264

Harmful if swallowed, in contact with skin or if inhaled. Causes severe skin burns and eye damage.

Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling.

Aldrich- 728772

P270 P271 P280	Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
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.
P322	Specific measures (see supplemental first aid instructions on this label).
P363	Wash contaminated clothing before reuse.
P405	Store locked up.
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**

<b>Substances</b> Formula	: C <sub>5</sub> HCl <sub>3</sub> N <sub>2</sub> O
Molecular weight	: 211.43 g/mol
CAS-No.	: 2972-52-3

# Hazardous components

Component	Classification	Concentration	
2,4-DICHLOROPYRIMIDINE-5-CARBONYL CHLORIDE			
	Acute Tox. 4; Skin Corr. 1B; Eye Dam. 1; H302 + H312 +	<= 100 %	
	H332, H314		

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

# **4. FIRST AID MEASURES**

3.1

#### 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.

#### lf inhaled

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

#### In case of skin contact

Take off contaminated clothing and shoes immediately. 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. Continue rinsing eyes during transport to hospital.

#### 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

#### **5. FIREFIGHTING MEASURES**

#### 5.1 Extinguishing media

#### Suitable extinguishing media

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

**5.2** Special hazards arising from the substance or mixture Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas

# 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information No data available

# 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. Evacuate personnel to safe areas. For personal protection see section 8.
- 6.2 Environmental precautions Do not let product enter drains.
- 6.3 Methods and materials for containment and cleaning up Soak up with inert absorbent material and dispose of as hazardous waste. 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. Normal measures for preventive fire protection. 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.

Handle and store under inert gas.

#### 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). **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 (US) or type ABEK (EN 14387) respirator cartridges as a backup to enginee 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

Do not let product enter drains.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

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

a)	Appearance	Form: liquid Colour: light yellow	
b)	Odour	No data available	
c)	Odour Threshold	No data available	
d)	рН	No data available	
e)	Melting point/freezing point	No data available	
f)	Initial boiling point and boiling range	67 - 70 °C (153 - 158 °F) at 0.13 hPa	
g)	Flash point	93.3 °C (199.9 °F)	
h)	Evaporation rate	No data available	
i)	Flammability (solid, gas)	No data available	
j)	Upper/lower flammability or explosive limits	No data available	
k)	Vapour pressure	No data available	
I)	Vapour density	No data available	
m)	Relative density	1.645 g/cm3	
n)	Water solubility	No data available	
0)	Partition coefficient: n- octanol/water	log Pow: 1.773	
p)	Auto-ignition temperature	No data available	
q)	Decomposition temperature	No data available	
r)	Viscosity	No data available	
s)	Explosive properties	No data available	
t)	Oxidizing properties	No data available	
Other safety information			

# 9.2 Other safety information No data available

# **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** No data available
- **10.5** Incompatible materials Strong oxidizing agents
- 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 available2,4-DICHLOROPYRIMIDINE-5-CARBONYL CHLORIDE Inhalation: No data available(2,4-DICHLOROPYRIMIDINE-5-CARBONYL CHLORIDE) Dermal: No data available(2,4-DICHLOROPYRIMIDINE-5-CARBONYL CHLORIDE) No data available(2,4-DICHLOROPYRIMIDINE-5-CARBONYL CHLORIDE)

#### Skin corrosion/irritation

No data available(2,4-DICHLOROPYRIMIDINE-5-CARBONYL CHLORIDE)

#### Serious eye damage/eye irritation

No data available(2,4-DICHLOROPYRIMIDINE-5-CARBONYL CHLORIDE)

#### Respiratory or skin sensitisation

No data available(2,4-DICHLOROPYRIMIDINE-5-CARBONYL CHLORIDE)

#### Germ cell mutagenicity

#### 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(2,4-DICHLOROPYRIMIDINE-5-CARBONYL CHLORIDE)

No data available(2,4-DICHLOROPYRIMIDINE-5-CARBONYL CHLORIDE)

Specific target organ toxicity - single exposure No data available(2.4-DICHLOROPYRIMIDINE-5-CARBONYL CHLORIDE)

#### Specific target organ toxicity - repeated exposure No data available

#### Aspiration hazard

No data available(2,4-DICHLOROPYRIMIDINE-5-CARBONYL CHLORIDE)

# Additional Information

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.(2,4-DICHLOROPYRIMIDINE-5-CARBONYL CHLORIDE)

# **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(2,4-DICHLOROPYRIMIDINE-5-CARBONYL CHLORIDE)

#### **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

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 chem scrubber.

#### **Contaminated packaging**

Dispose of as unused product.

# **14. TRANSPORT INFORMATION**

#### DOT (US)

UN number: 3265 Class: 8 Packing group: III Proper shipping name: Corrosive liquid, acidic, organic, n.o.s. (2,4-DICHLOROPYRIMIDINE-5-CARBONYL CHLORIDE) Poison Inhalation Hazard: No

# IMDG

UN number: 3265 Class: 8 Packing group: III EMS-No: F-A, S-B Proper shipping name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (2,4-DICHLOROPYRIMIDINE-5-CARBONYL CHLORIDE)

# ΙΑΤΑ

UN number: 3265 Class: 8 Packing group: III Proper shipping name: Corrosive liquid, acidic, organic, n.o.s. (2,4-DICHLOROPYRIMIDINE-5-CARBONYL CHLORIDE)

# 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

Aldrich-728772

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		
2,4-DICHLOROPYRIMIDINE-5-CARBONYL CHLORIDE	CAS-No. 2972-52-3	Revision Date
New Jersey Right To Know Components		
2,4-DICHLOROPYRIMIDINE-5-CARBONYL CHLORIDE	CAS-No. 2972-52-3	Revision Date

#### 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.

H302 H302 + H312 + H332	Harmful if swallowed. Harmful if swallowed, in contact with skin or if inhaled.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H332	Harmful if inhaled.

Health hazard:	3
Chronic Health Hazard: Flammability: Physical Hazard	0 0
<b>NFPA Rating</b> Health hazard: Fire Hazard: Reactivity Hazard:	3 2 0

#### Further information

Copyright 2016 Sigma-Aldrich Co. LLC. License granted to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

# **Preparation Information**

Sigma-Aldrich Corporation Product Safety – Americas Region 1-800-521-8956 Version: 6.0 Revision Da

Revision Date: 05/28/2017

Print Date: 11/16/2018