

## Chemical Safety Data Sheet MSDS / SDS

**2-PYRAZINECARBONYL CHLORIDE**Revision Date:2026-05-31 Revision Number:1

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****Product identifier**

Product name : 2-PYRAZINECARBONYL CHLORIDE  
CBnumber : CB9367638  
CAS : 19847-10-0  
EINECS Number : 243-367-4  
Synonyms : pyrazine-2-carbonyl chloride,2-PYRAZINECARBONYL CHLORIDE

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

Relevant identified uses : For R&D use only. Not for medicinal, household or other use.  
Uses advised against : none

**Company Identification**

Company : Chemicalbook  
Address : Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing  
Telephone : 010-86108875

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**SECTION 2: Hazards identification****GHS Label elements, including precautionary statements**

Symbol(GHS)



Signal word No data available

**Precautionary statements**

P405 Store locked up.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continuerinsing.  
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.  
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

**Hazard statements**

H318 Causes serious eye damage  
H314 Causes severe skin burns and eye damage

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**SECTION 3: Composition/information on ingredients**

## Substance

Product name	: 2-PYRAZINECARBONYL CHLORIDE
Synonyms	: pyrazine-2-carbonyl chloride,2-PYRAZINECARBONYL CHLORIDE
CAS	: 19847-10-0
EC number	: 243-367-4
MF	: C5H3ClN2O
MW	: 142.54

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## SECTION 4: First aid measures

### Eye Contact

Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

### Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required.

### Inhalation

Remove from exposure, lie down. Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Immediate medical attention is required.

### Ingestion

Do NOT induce vomiting. Call a physician immediately.

### Most important symptoms and effects

Causes burns by all exposure routes. 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

### Self-Protection of the First Aider

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

### Notes to Physician

Treat symptomatically.

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## SECTION 5: Firefighting measures

### Suitable Extinguishing Media

Carbon dioxide (CO<sub>2</sub>). Dry chemical. Chemical foam.

### Extinguishing media which must not be used for safety reasons

Water.

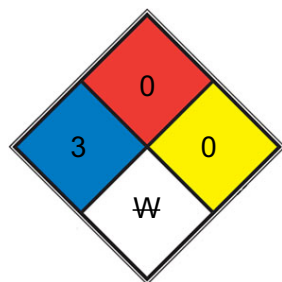
### Specific Hazards Arising from the Chemical

Contact with water liberates toxic gas. Water reactive. Produce flammable gases on contact with water.

### 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.

### NFPA 704



■ HEALTH 3 Short exposure could cause serious temporary or moderate residual injury (e.g. [liquid hydrogen](#), [sulfuric acid](#), [calcium hypochlorite](#), hexafluorosilicic acid)

■ FIRE 0 Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand. Materials that will not burn in air when exposed to a temperature of 820 °C (1,500 °F) for a period of 5 minutes.(e.g. Carbon tetrachloride)

■ REACT 0 Normally stable, even under fire exposure conditions, and is not reactive with water (e.g. helium,[N2](#))

□ SPEC. W  
HAZ.

## SECTION 6: Accidental release measures

### Personal Precautions

Ensure adequate ventilation.

### Environmental Precautions

See Section 12 for additional Ecological Information.

### Methods for Containment and Clean Up

Wear self-contained breathing apparatus and protective suit. Sweep up and shovel into suitable containers for disposal. Do not expose spill to water.

Refer to protective measures listed in Sections 8 and 13.

## SECTION 7: Handling and storage

### Handling

Do not breathe dust. Do not breathe mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Handle product only in closed system or provide appropriate exhaust ventilation. Do not allow contact with water. Do not allow contact with water because of violent reaction. Handle under argon.

### Storage

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep from any possible contact with water. Corrosives area. Store under an inert atmosphere.

### Specific Use(s)

Use in laboratories

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## SECTION 8: Exposure controls/personal protection

### Control Parameters

### Exposure Controls

### Engineering Measures

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source.

### Personal protective equipment

#### Eye Protection

Goggles (European standard - EN 166)

#### Hand Protection

Protective gloves

Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
Disposable gloves	See manufacturers recommendations	-	EN 374	(minimum requirement)

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves.

(Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatibility, Dexterity, Operational conditions, User susceptibility, e.g.

sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

#### Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure

#### 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.

To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly

#### **Large scale/emergency use**

In case of insufficient ventilation, wear suitable respiratory equipment

#### **Small scale/Laboratory use**

Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

When RPE is used a face piece Fit Test should be conducted

#### **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice.

#### **Environmental exposure controls**

No information available.

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## SECTION 9: Physical and chemical properties

### **Information on basic physicochemical properties**

Purple

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#### **Physical State**

Solid

#### **Odor**

No information available

#### **Odor Threshold**

No data available

#### **pH**

No data available

#### **Melting Point/Range**

150 °C / 302 °F

#### **Softening Point**

No data available

#### **Boiling Point/Range**

214.5±20.0 °C(Predicted)

#### **Flash Point**

No information available

Method - No information available

#### **Evaporation Rate**

No data available

### **Flammability (solid,gas)**

No information available

### **Explosion Limits**

No data available

### **Vapor Pressure**

No data available

### **Vapor Density**

No data available (Air = 1.0)

### **Specific Gravity / Density**

1.393±0.06 g/cm<sup>3</sup>(Predicted)

### **Bulk Density**

1.393±0.06 g/cm<sup>3</sup>(Predicted)

### **Water Solubility**

Reacts with water.

### **Solubility in other solvents**

No information available

### **Partition Coefficient (n-octanol/water)**

No data available

### **Autoignition Temperature**

No data available

### **Decomposition Temperature**

No data available

### **Viscosity**

No data available

### **Explosive Properties**

No information available

### **Oxidizing Properties**

No information available

### **Molecular Formula**

C<sub>5</sub> H<sub>3</sub> Cl N<sub>2</sub> O

## Molecular Weight

142.54

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## SECTION 10: Stability and reactivity

### Stability

Stable under normal conditions. Moisture sensitive.

### Hazardous Reactions

No information available.

### Hazardous Polymerization

No information available.

### Conditions to Avoid

Incompatible products. Exposure to moist air or water.

### Materials to avoid

Water. Strong oxidizing agents. Strong acids. Strong bases. Amines. Strong reducing

### Hazardous Decomposition Products

Nitrogen oxides (NO<sub>x</sub>). Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Chlorine. Hydrogen agents. Acid chlorides.  
chloride gas.

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## SECTION 11: Toxicological information

### Product Information

No acute toxicity information is available for this product

#### (a) acute toxicity;

#### (b) skin corrosion/irritation;

No data available

#### (c) serious eye damage/irritation;

No data available

#### (d) respiratory or skin sensitization;

### Respiratory

No data available

### Skin

No data available

**(e) germ cell mutagenicity;**

No data available

**(f) carcinogenicity;**

No data available

There are no known carcinogenic chemicals in this product

**(g) reproductive toxicity;**

No data available

**(h) STOT-single exposure;**

No data available

**(i) STOT-repeated exposure;**

No data available

**Target Organs**

No information available.

**(j) aspiration hazard;**

No data available

**Other Adverse Effects**

The toxicological properties have not been fully investigated.

**Symptoms / effects, both acute and delayed**

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

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## SECTION 12: Ecological information

**Ecotoxicity effects**

Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.

**Persistence and Degradability**

No information available

**Bioaccumulative Potential**

No information available

**Mobility in soil**

No information available

**Endocrine Disruptor Information**

This product does not contain any known or suspected endocrine disruptors  
Chemical Book

### **Persistent Organic Pollutant**

This product does not contain any known or suspected substance

### **Ozone Depletion Potential**

This product does not contain any known or suspected substance

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## **SECTION 13: Disposal considerations**

### **Waste from Residues/Unused Products**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

### **Contaminated Packaging**

Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use empty containers.

### **Other Information**

Waste codes should be assigned by the user based on the application for which the product was used.

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## **SECTION 14: Transport information**

### **Road and Rail Transport**

#### **UN-No**

UN3261

#### **Proper Shipping Name**

CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.

#### **Technical Shipping Name**

Pyrazine-2-carbonyl chloride

#### **Hazard Class**

8

#### **Packing Group**

II

### **IMDG/IMO**

#### **UN-No**

UN3261

#### **Proper Shipping Name**

CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.

#### **Technical Shipping Name**

Pyrazine-2-carbonyl chloride

#### **Hazard Class**

8

**Packing Group**

II

**IATA****UN-No**

UN3261

**Proper Shipping Name**

CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.

**Technical Shipping Name**

Pyrazine-2-carbonyl chloride

**Hazard Class**

8

**Packing Group**

II

**Special Precautions for User**

No special precautions required

**SECTION 15: Regulatory information****International Inventories**

X = listed, China (IECSC), Europe (EINECS/ELINCS/NLP), U.S.A. (TSCA), Canada (DSL/NDL), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), Korea (KECL).

Component	The Inventory of Hazardous Chemicals(2015 Edition)	List of dangerous goods GB 12268-2012	TCSI	IECSC	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	AICS	KECL
Pyrazinecarbonyl chloride	-	-	-	243-367-4	-	-	-	-	-	-	-	-

**National Regulations****SECTION 16: Other information****Prepared By**

Health, Safety and Environmental Department

**Revision Date**

18-Sep-2025

**Revision Summary**

Not applicable.

**Training Advice**

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

## **Legend**

### **CAS**

Chemical Abstracts Service

### **TSCA**

United States Toxic Substances Control Act Section 8(b)

Inventory

### **EINECS/ELINCS**

European Inventory of Existing Commercial Chemical

Substances/EU List of Notified Chemical Substances

### **DSL/NDSL**

Canadian Domestic Substances List/Non-Domestic

Substances List

### **PICCS**

Philippines Inventory of Chemicals and Chemical Substances

### **ENCS**

Japanese Existing and New Chemical Substances

### **IECSC**

Chinese Inventory of Existing Chemical Substances

### **AICS**

Australian Inventory of Chemical Substances

### **KECL**

Korean Existing and Evaluated Chemical Substances

### **NZIoC**

New Zealand Inventory of Chemicals

### **WEL**

Workplace Exposure Limit

### **TWA**

Time Weighted Average

### **ACGIH**

American Conference of Governmental Industrial Hygienists

### **IARC**

International Agency for Research on Cancer

### **DNEL**

Derived No Effect Level

### **PNEC**

Predicted No Effect Concentration

### **RPE**

Respiratory Protective Equipment

### **LD50**

Lethal Dose 50%

### **LC50**

Lethal Concentration 50%

### **EC50**

Effective Concentration 50%

**NOEC**

No Observed Effect Concentration

**POW**

Partition coefficient Octanol:Water

**PBT**

Persistent, Bioaccumulative, Toxic

**vPvB**

very Persistent, very Bioaccumulative

**ICAO/IATA**

International Civil Aviation Organization/International Air  
Transport Association

**IMO/IMDG**

International Maritime Organization/International Maritime  
Dangerous Goods Code

**ADR**

European Agreement Concerning the International Carriage of  
Dangerous Goods by Road

**MARPOL**

International Convention for the Prevention of Pollution from  
Ships

**OECD**

Organisation for Economic Co-operation and Development

**ATE**

Acute Toxicity Estimate

**BCF**

Bioconcentration factor

**VOC**

(Volatile Organic Compound)

**Key literature references and sources for data**

<https://echa.europa.eu/information-on-chemicals>

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

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