

## Chemical Safety Data Sheet MSDS / SDS

## PROPIONIC ACID-D5

Revision Date:2026-05-31 Revision Number:1

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

**Product identifier**

Product name : PROPIONIC ACID-D5  
CBnumber : CB9720183  
CAS : 60153-92-6  
Synonyms : propanoic-d5 acid,PROPIONIC-D5 ACID

**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

## SECTION 2: Hazards identification

**GHS Label elements, including precautionary statements**

Symbol(GHS)



Signal word

Danger

**Precautionary statements**

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

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.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

**Hazard statements**

H314 Causes severe skin burns and eye damage

H226 Flammable liquid and vapour

## SECTION 3: Composition/information on ingredients

## Substance

|              |                                       |
|--------------|---------------------------------------|
| Product name | : PROPIONIC ACID-D5                   |
| Synonyms     | : propanoic-d5 acid,PROPIONIC-D5 ACID |
| CAS          | : 60153-92-6                          |
| MF           | : C3H6O2                              |
| MW           | : 74.08                               |

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## SECTION 4: First aid measures

### Description of first aid measures

#### General information

Immediately remove any clothing soiled by the product.

#### After inhalation

In case of unconsciousness place patient stably in side position for transportation.

#### After skin contact

Immediately wash with water and soap and rinse thoroughly.

#### After eye contact

Rinse opened eye for several minutes under running water. Then consult a doctor.

#### After swallowing

Drink copious amounts of water and provide fresh air. Immediately call a doctor.

#### Information for doctor

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

No further relevant information available.

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

No further relevant information available.

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## SECTION 5: Firefighting measures

### Extinguishing media

#### Suitable extinguishing agents

CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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

No further relevant information available.

## **Advice for firefighters**

## **Protective equipment**

No special measures required.

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# SECTION 6: Accidental release measures

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

Wear protective equipment. Keep unprotected persons away.

## **Environmental precautions**

Do not allow to enter sewers/ surface or ground water.

## **Methods and material for containment and cleaning up**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralizing agent.

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

## **Protective Action Criteria for Chemicals**

### **PAC-1**

Substance is not listed.

### **PAC-2**

Substance is not listed.

### **PAC-3**

Substance is not listed.

## **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

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# SECTION 7: Handling and storage

## **Handling**

### **Precautions for safe handling**

No special precautions are necessary if used correctly.

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

Avoid prolonged or repeated exposure.

Keep away from sources of ignition.

Take precautionary measures against static discharge.re.

### **Information about protection against explosions and fires**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

### **Conditions for safe storage, including any incompatibilities**

#### **Storage**

Store in accordance with information listed on the product insert.

#### **Requirements to be met by storerooms and receptacles**

No special requirements.

#### **Information about storage in one common storage facility**

Not required.

#### **Further information about storage conditions**

Keep receptacle tightly sealed.

#### **Specific end use(s)**

No further relevant information available.

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## **SECTION 8: Exposure controls/personal protection**

### **Additional information about design of technical systems**

No further data; see section 7.

### **Control parameters**

### **Components with limit values that require monitoring at the workplace**

Not required.

### **Additional information**

The lists that were valid during the creation were used as basis.

### **Exposure controls**

### **Personal protective equipment**

### **General protective and hygienic measures**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

### **Breathing equipment**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

### **Protection of hands**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

### **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

### **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

### **Eye protection**

Tightly sealed goggles

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## SECTION 9: Physical and chemical properties

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

#### **Appearance**

#### **Physical State**

Liquid

#### **Color**

Colourless

#### **Odor**

Characteristic

#### **Structural Formula**

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

#### **Molecular Weight**

79.1 g/mol

#### **Odor Threshold**

Not determined.

**pH**

Not determined.

**Change in condition****Melting point/Melting range**

Undetermined.

**Boiling point/Boiling range**

141°C(lit.)

**Flash point**

≤60 °C (≤140 °F)

**Flammability (solid,gas)**

Flammable.

**Decomposition temperature**

Not determined.

**Ignition temperature**

Not determined.

**Danger of explosion**

Not determined.

**Explosion limits**

Lower: Not determined.

Upper: Not determined.

**Vapor Pressure**

Not determined.

**Density**

1.059 g/mL at 25 °C

**Relative Density**

1.059 g/mL at 25 °C

**Vapor Density**

Not determined.

**Evaporation Rate**

Not determined.

**Solubility in / Miscibility with**

Chloroform (Sparingly), Methanol (Slightly)

#### **Water**

Not determined.

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

Not determined.

#### **Viscosity**

#### **Dynamic**

Not determined.

#### **Kinematic**

Not determined.

#### **Other information**

No information available

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## SECTION 10: Stability and reactivity

#### **Reactivity**

No further relevant information available.

#### **Chemical stability**

#### **Thermal decomposition / conditions to be avoided**

No decomposition if used according to specifications.

#### **Possibility of hazardous reactions**

No dangerous reactions known.

#### **Conditions to avoid**

No further relevant information available.

#### **Incompatible materials**

No further relevant information available.

#### **Hazardous decomposition products**

No dangerous decomposition products known.

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## SECTION 11: Toxicological information

#### **Information on toxicological effects**

### **Acute toxicity**

#### **Primary irritant effect**

##### **on the skin**

Caustic effect on skin and mucous membranes.

##### **on the eye**

Strong caustic effect.

#### **Sensitization**

No sensitizing effects known.

#### **Additional toxicological information**

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

#### **Carcinogenic categories**

##### **IARC (International Agency for Research on Cancer)**

Substance is not listed.

##### **NTP (National Toxicology Program)**

Substance is not listed.

##### **OSHA-Ca (Occupational Safety & Health Administration)**

Substance is not listed.

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## SECTION 12: Ecological information

### **Toxicity**

#### **Aquatic toxicity**

No further relevant information available.

#### **Persistence and degradability**

No further relevant information available.

#### **Behavior in environmental systems**

#### **Bioaccumulative potential**

No further relevant information available.

#### **Mobility in soil**

No further relevant information available.

## Additional ecological information

### General notes

Water hazard class 1 (Self-assessment) slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

### Results of PBT and vPvB assessment

#### PBT

Not applicable.

#### vPvB

Not applicable.

#### PBT:

Not applicable.

#### vPvB:

Not applicable.

### Other adverse effects

No further relevant information available.

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## SECTION 13: Disposal considerations

### Waste treatment methods

#### Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

### Uncleaned packagings

#### Recommendation

Disposal must be made according to official regulations.

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## SECTION 14: Transport information

### UN-Number

DOT, IMDG, IATA UN1993

### UN proper shipping name

DOT Flammable liquids, n.o.s. (Propionic Acid-d5)

IMDG FLAMMABLE LIQUID, N.O.S. (Propionic Acid-d5)

IATA Flammable liquid, n.o.s. (Propionic Acid-d5)

**Transport hazard class(es)**

**DOT**

Class: 3 Flammable liquids

Label: 3

**IMDG, IATA**

Class: 3 Flammable liquids

Label: 3

**Packing group**

DOT, IMDG, IATA III

**Environmental hazards**

Not applicable.

**Special precautions for user**

Warning: Flammable liquids

**Hazard identification number (Kemler code)**

30

**EMS Number**

F-E,S-E

**Stowage Category**

A

**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

**Transport/Additional information**

**DOT:**

**Quantity limitations**

On passenger aircraft/rail: 60 L

On cargo aircraft only: 220 L

**IMDG:**

**Limited quantities (LQ)**

5L

**Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

#### **IATA:**

#### **Remarks**

When sold in quantities of less than or equal to 1 mL, or 1 g, with an Excepted Quantity Code of

E1, E2, E4, or E5, this item meets the De Minimis

Quantities exemption, per IATA 2.6.10.

Therefore packaging does not have to be labeled as

Dangerous Goods/Excepted Quantity.

#### **UN "Model Regulation"**

UN 1993 FLAMMABLE LIQUID, N.O.S. (PROPIONIC

ACID-D5), 3, III

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## SECTION 15: Regulatory information

### **Safety, health and environmental regulations/legislation specific for the substance or mixture**

No further relevant information available.

#### **Sara**

|   |                          |
|---|--------------------------|
| Section 355 (extremely hazardous substances):   | Substance is not listed. |
| Section 313 (Specific toxic chemical listings): | Substance is not listed. |
| TSCA (Toxic Substances Control Act):            | Substance is not listed. |
| Hazardous Air Pollutants:                       | Substance is not listed. |

#### **Proposition 65**

|   |                          |
|---|--------------------------|
| Chemicals known to cause cancer:                            | Substance is not listed. |
| Chemicals known to cause reproductive toxicity for females: | Substance is not listed. |
| Chemicals known to cause reproductive toxicity for males:   | Substance is not listed. |
| Chemicals known to cause developmental toxicity:            | Substance is not listed. |

#### **Chemicals known to cause cancer**

Substance is not listed.

#### **Chemicals known to cause reproductive toxicity for females**

Substance is not listed.

#### **Chemicals known to cause reproductive toxicity for males**

Substance is not listed.

#### **Chemicals known to cause developmental toxicity**

Substance is not listed.

### Carcinogenic categories

|  |                          |
|--|--------------------------|
| EPA (Environmental Protection Agency): | Substance is not listed. |
|--|--------------------------|

### TLV (Threshold Limit Value)

Substance is not listed.

### NIOSH-Ca (National Institute for Occupational Safety and Health)

Substance is not listed.

### Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

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## SECTION 16: Other information

### Abbreviations and acronyms

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMS: Hazardous Materials Identification System (USA)

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Flammable Liquids 3: Flammable liquids – Category 3

Skin Corrosion 1B: Skin corrosion/irritation – Category 1B

Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3

#### Disclaimer:

The information in this MSDS is only applicable to the specified product, unless otherwise specified, it is not applicable to the mixture of this product and other substances. This MSDS only provides information on the safety of the product for those who have received the appropriate professional training for the user of the product. Users of this MSDS must make independent judgments on the applicability of this SDS. The authors of this MSDS will not be held responsible for any harm caused by the use of this MSDS.