

## Chemical Safety Data Sheet MSDS / SDS

## PAz-PC

Revision Date:2026-07-18 Revision Number:1

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

## Product identifier

Product name : PAz-PC  
CBnumber : CB92591956  
CAS : 117746-89-1  
Synonyms : PazePC

## 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

P501 Dispose of contents/container to.....  
P403+P235 Store in a well-ventilated place. Keep cool.  
P370+P378 In case of fire: Use ... for extinction.  
P337+P313 IF eye irritation persists: Get medical advice/attention.  
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.  
P264 Wash skin thoroughly after handling.  
P243 Take precautionary measures against static discharge.  
P242 Use only non-sparking tools.

P241 Use explosion-proof electrical/ventilating/lighting/.../equipment.  
P240 Ground/bond container and receiving equipment.  
P233 Keep container tightly closed.  
P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

#### **Hazard statements**

H319 Causes serious eye irritation  
H225 Highly Flammable liquid and vapour

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## SECTION 3: Composition/information on ingredients

### **Substance**

|              |               |
|--------------|---------------|
| Product name | : PAz-PC      |
| Synonyms     | : PazePC      |
| CAS          | : 117746-89-1 |
| MF           | : C33H64NO10P |
| MW           | : 665.836     |

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## SECTION 4: First aid measures

### **General advice**

First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

### **If inhaled**

After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.

### **In case of skin contact**

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

### **In case of eye contact**

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

### **If swallowed**

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

### **Protection of first-aiders**

For personal protection see section 8.

### **Notes to physician**

No data available

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## SECTION 5: Firefighting measures

### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

### Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

### Specific hazards during fire fighting

Not combustible. Ambient fire may liberate hazardous vapours.

### Hazardous combustion products

Carbon oxides Hydrogen chloride gas

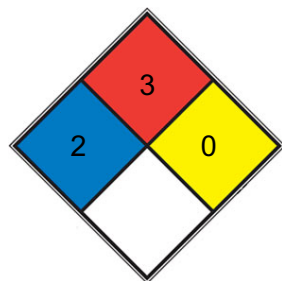
### Specific extinguishing methods

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

### Special protective equipment for fire-fighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

### NFPA 704



**HEALTH 2** Intense or continued but not chronic exposure could cause temporary incapacitation or possible residual injury (e.g. [diethyl ether](#), ammonium phosphate, iodine)

**FIRE 3** Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions . Liquids having a flash point below 22.8 °C (73 °F) and having a boiling point at or above 37.8 °C (100 °F) or having a flash point between 22.8 and 37.8 °C (73 and 100 °F). (e.g. gasoline, [acetone](#))

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

**SPEC.**

**HAZ.**

## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. Advice for emergency responders: For personal protection see section 8.

### **Environmental precautions**

Do not let product enter drains.

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

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material. Dispose of properly. Clean up affected area.

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## **SECTION 7: Handling and storage**

### **Handling**

#### **Advice on safe handling**

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

#### **Avoidance of contact**

Strong oxidizing agents Strong bases Magnesium Sodium/sodium oxides Lithium various plastics

### **Storage**

#### **Further information on storage conditions**

Tightly closed. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.

#### **Storage class**

6.1D, Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects

#### **Recommended storage temperature**

-20 °C

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

### **control parameter**

#### **Hazard composition and occupational exposure limits**

Does not contain substances with occupational exposure limits.

### **Engineering measures**

No data available

### **Personal protective equipment**

#### **Respiratory protection**

required when vapours/aerosols are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

#### **Recommended Filter type**

Filter type AX

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the

instructions of the producer. These measures have to be properly documented.

**Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Safety glasses

**Skin and body protection**

protective clothing

**Hand protection****Remarks**

required

**Hygiene measures**

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

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## SECTION 9: Physical and chemical properties

**Information on basic physicochemical properties**

liquid

**Color**

colorless

**Odor**

sweet

**Odor Threshold**

No data available

**pH**

No data available

**Melting point/ range**

-63.5 °C (1,013 hPa)

**Boiling point/boiling range**

61.2 °C (1,013 hPa)

Flash point : Method: DIN 51755 Part 1 does not flash Not applicable

**Evaporation rate**

No data available

**Flammability (solid, gas)**

No data available

**Flammability (liquids)**

The product is not flammable.

**Burning rate**

No data available

**Self-ignition**

> 600 °C 1,013 hPa

Method: DIN 51794 Not applicable

**Upper explosion limit / Upper flammability limit**

Not applicable

**Lower explosion limit / Lower flammability limit**

Not applicable

**Vapor pressure**

210 hPa (20 °C)

**Relative vapor density**

4.12

**Relative density**

No data available

**Density**

1.49 g/cm<sup>3</sup>

**Water solubility**

8.7 g/l (23 °C)

Method: OECD Test Guideline 105

**Partition coefficient: n-octanol/water**

log Pow: 1.97 (25 °C)

Method: (experimental) (ECHA) Bioaccumulation is not expected.

**Autoignition temperature**

Not applicable

Decomposition tempera-: Distillable in an undecomposed state at normal presture sure.

**Viscosity, dynamic**

No data available

**Viscosity, kinematic**

No data available

**Flow time**

No data available

**Explosive properties**

No data available

**Oxidizing properties**

none

**Surface tension**

27.1 mN/m, 20.0 °C

**Particle characteristics Particle size**

No data available

**Solubility in other solvents**

miscible organic solvent: (20 °C)

**Physical state**

Solid

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## SECTION 10: Stability and reactivity

**Reactivity**

No data available

**Chemical stability**

The product is chemically stable under standard ambient conditions (room temperature) .

**Contains the following stabilizer(s):**

ethanol (0.5 %)

**Possibility of hazardous reactions**

No data available

**Conditions to avoid**

no information available

**Incompatible materials**

Strong oxidizing agents Strong bases Magnesium Sodium/sodium oxides Lithium various plastics

**Hazardous decomposition products**

In the event of fire: see section 5

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## SECTION 11: Toxicological information

**11.1 Information on toxicological effects**

**Mixture Acute toxicity**

Acute toxicity estimate Oral - 913.48 mg/kg (Calculation method)

Symptoms: Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

Acute toxicity estimate Inhalation - 4 h - 3.12 mg/l - vapor (Calculation method)

Symptoms: Possible symptoms: mucosal irritations

Dermal: No data available

**Skin corrosion/irritation**

Remarks: Mixture causes skin irritation.

**Serious eye damage/eye irritation**

Remarks: Mixture causes serious eye irritation.

**Respiratory or skin sensitization**

Classified based on available data. For more details, see section 2

**Germ cell mutagenicity**

Classified based on available data. For more details, see section 2

**Carcinogenicity**

Evidence of a carcinogenic effect.

**Reproductive toxicity**

Suspected of damaging the unborn child.

Suspected of damaging fertility.

**Specific target organ toxicity - single exposure**

Mixture may cause drowsiness or dizziness.

**Specific target organ toxicity - repeated exposure**

Mixture causes damage to organs through prolonged or repeated exposure.

- Liver, Kidney

**Aspiration hazard**

Classified based on available data. For more details, see section 2

**11.2 Additional Information**

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

Other dangerous properties can not be excluded.

This substance should be handled with particular care.

Handle in accordance with good industrial hygiene and safety practice.

**Components Chloroform****Acute toxicity**

LD50 Oral - Rat - male - 908 mg/kg (OECD Test Guideline 401)

LC50 Inhalation - Rat - 6 h - 9.17 mg/l - vapor

Acute toxicity estimate Inhalation - Expert judgment - 4 h - 3.1 mg/l - vapor

Dermal: No data available

**Skin corrosion/irritation**

Skin - Rabbit

Result: Irritating to skin. - 24 h

Remarks: (ECHA)

Remarks: Drying-out effect resulting in rough and chapped skin.

Skin - Rabbit

Result: slight irritation

Remarks: (IUCLID)

**Serious eye damage/eye irritation**

Eyes - Rabbit

Result: Irritating to eyes.

Remarks: (ECHA)

Remarks: (Regulation (EC) No 1272/2008, Annex VI)

**Respiratory or skin sensitization**

Maximization Test - Guinea pig

Result: negative (Regulation (EC) No. 440/2008, Annex, B.6)

**Germ cell mutagenicity**

Test Type: Ames test

Test system: Escherichia coli/Salmonella typhimurium

Result: negative

Remarks: (ECHA)

Test Type: unscheduled DNA synthesis assay

Test system: Liver

Result: negative

Remarks: (ECHA)

Method: OECD Test Guideline 474

Species: Rat - male and female - Red blood cells (erythrocytes)

Result: negative

Method: OECD Test Guideline 486

Species: Rat - male - Liver cells

Result: negative

Species: Mouse - female

Result: negative

Remarks: (ECHA)

**Carcinogenicity**

Suspected of causing cancer.

**Reproductive toxicity**

Suspected of damaging the unborn child.

**Specific target organ toxicity - single exposure**

May cause drowsiness or dizziness.

**Specific target organ toxicity - repeated exposure**

Oral - Causes damage to organs through prolonged or repeated exposure.

- Liver, Kidney

**Aspiration hazard**

Classified based on available data. For more details, see section 2

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## SECTION 12: Ecological information

## Ecotoxicity

### Components:

#### Chloroform:

##### Toxicity to daphnia and other aquatic invertebrates

EC50 (Crassostrea gigas): 152.5 mg/l Exposure time: 48 h Test Type: static test Analytical monitoring: yes Remarks: (ECHA)

##### Toxicity to algae/aquatic plants

ErC50 (Chlamydomonas reinhardtii (green algae)): 13.3 mg/l Exposure time: 72 h Test Type: static test Analytical monitoring: yes Remarks: (ECHA)

##### Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)

NOEC (Daphnia magna (Water flea)): 6.3 mg/l End point: reproduction rate Exposure time: 21 d Test Type: semi-static test Analytical monitoring: yes Remarks: (ECHA)

## Ecotoxicology Assessment

### Chronic aquatic toxicity

This product has no known ecotoxicological effects.

### Persistence and degradability

### Components:

#### Chloroform:

##### Biodegradability

Remarks: No data available

##### Bioaccumulative potential

### Components:

#### Chloroform:

##### Bioaccumulation

Remarks: No data available

### Mobility in soil

### Components:

#### Chloroform:

##### Distribution among environmental compartments

Adsorption/Soil Koc: 52.5, log Koc: 1.72 Method: (experimental) Remarks: Mobile in soils

### Other adverse effects

### Components:

#### Chloroform:

### Results of PBT and vPvB assessment

Substance does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

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## SECTION 13: Disposal considerations

### Disposal methods

#### Waste from residues

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

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## SECTION 14: Transport information

### International Regulations

#### IATA-DGR

UN/ID No. : UN 1888

Proper shipping name : Chloroform solution

Class : 6.1

Packing group : III

Labels : Division 6.1 - Toxic substances

Packing instruction (cargo aircraft) : 680

Packing instruction (passenger aircraft) : 680

#### IMDG-Code

UN number : UN 1888

Proper shipping name : CHLOROFORM SOLUTION

Class : 6.1

Packing group : III

Labels : 6.1

EmS Code : F-A, S-A

Marine pollutant : no

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National regulation GB 6944/12268

UN number : UN 1888

Proper shipping name : CHLOROFORM

Class : 6.1

Packing group : III

Labels : 6.1

### Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged

material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

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## SECTION 15: Regulatory information

Downstream users need to comply with the conditions of safe use of the chemical, understand the environmental and health hazard and risk management measures identified on the SDS as well as the local/national regulations concerning the chemical.

### **National regulatory information**

#### **Law on the Prevention and Control of Occupational Diseases**

#### **Regulations on Safety Management of Hazardous Chemicals**

#### **Catalogue of Hazardous Chemicals**

#### **Hazardous Chemicals for Priority Management**

Not applicable under SAWS

#### **Catalogue of Specially Controlled Hazardous**

Listed Chemicals

#### **List of Explosive Precursors**

Not listed

#### **Regulation of Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals**

#### **China Severely Restricted Toxic Chemicals for Import and Export**

Not applicable

#### **Measures on the Environmental Administration of New Chemical Substances Registration**

#### **Registration/Notification number**

B1A222214452

#### **Regulation on the Administration of Precursor Chemicals**

#### **Catalogue and Classification of Precursor Chemicals**

Listed

#### **Regulations on the Administration of Controlled Chemicals**

#### **List of Controlled Chemicals**

Not listed

#### **Regulations of Ozone Depleting Substances Management**

## List of Controlled Ozone Depleting Substances

Not listed

## List of Controlled Ozone Depleting Substances Import and Export

Not listed

## Environmental Protection Law

## List of Priority Controlled Chemicals

Listed

## List of Key Controlled New Pollutants

Listed

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## SECTION 16: Other information

### Full text of other abbreviations

#### ACGIH

USA. ACGIH Threshold Limit Values (TLV)

#### GBZ 2.1-2007

Occupational exposure limits for hazardous agents in the workplace - Chemical hazardous agents.

#### ACGIH / TWA

8-hour, time-weighted average

**GBZ 2.1-2007 / PC-TWA AIC** - Australian Invent Transport by Land of Bra bw - Body weight; **CMR** Standard of the German List (Canada); **ECx** - Conc associated with x% respo Chemical Substances (Jap response; **ERG** - Emerge GLP - Good Laboratory P cer; **IATA** - International Construction and Equipm Half maximal inhibitory c tion; **IECSC** - Inventory o tional Maritime Dangerou Industrial Safety and H Standardization; **KECI** - K tration to 50 % of a test (Median Lethal Dose); **MA** lution from Ships; **n.o.s.** No Observed (Adverse) E fect Level; **NOELR** - No Norm; **NTP** - National Toxi icals; **OECD** - Organizatio fice of Chemical Safety a and Toxic substance; **PIC** stances; **(Q)SAR** - (Quant (EC) No 1907/2006 of th Registration, Evaluation, Accelerating Decompositi Chemical Substance Inve Thailand Existing Chemicala States); **UN** - United Nat Transport of Dangerous **WHMIS** - Workplace Hazar

Permissible concentration - time weighted average ry of Industrial Chemicals

**ANTT** - National Agency for il

**ASTM** - American Society for the Testing of Materials

- Carcinogen, Mutagen or Reproductive Toxicant

**DIN** nstitute for Standardisation

**DSL** - Domestic Substances ntration associated with x% response

**ELx** - Loading rate se

**EmS** - Emergency Schedule

**ENCS** - Existing and New n)

**ErCx** - Concentration associated with x% growth rate cy Response Guide

**GHS** - Globally Harmonized System

actice

IARC - International Agency for Research on Cancer  
 IBC - International Code for the Transport of Ships carrying Dangerous Chemicals in Bulk  
 LC50 - Lethal Concentration  
 ICAO - International Civil Aviation Organization - Existing Chemical Substances in China  
 IMDG - International Maritime Dangerous Goods  
 IMO - International Maritime Organization  
 ISHL - International Safety Law (Japan)  
 ISO - International Organisation for Standardisation  
 LC50 - Lethal Concentration  
 LD50 - Lethal Dose to 50% of a test population  
 POL - International Convention for the Prevention of Pollution from Ships - Not Otherwise Specified  
 NCh - Chilean Norm  
 NO(A)EC - No Observed Effect Concentration  
 NO(A)EL - No Observed (Adverse) Effect Loading Rate  
 NOM - Official Mexican Standard  
 NZIoC - New Zealand Inventory of Chemicals for Economic Co-operation and Development  
 OPPTS - Office of Pollution Prevention and Control  
 PBT - Persistent, Bioaccumulative and Toxic - Philippines Inventory of Chemicals and Chemical Substances  
 Structure Activity Relationship  
 REACH - Regulation of the European Parliament and of the Council concerning the Restriction of Chemicals  
 SADT - Self-Heating Temperature  
 SDS - Safety Data Sheet  
 TCSI - Taiwan Chemical Safety Information  
 TDG - Transportation of Dangerous Goods  
 TECS Inventory  
 TSCA - Toxic Substances Control Act (United States)  
 UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods  
 vPvB - Very Persistent and Very Bioaccumulative  
 GHS - Globally Harmonized System of Classification and Labelling of Chemicals

**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.