

Version: v1
Revision Date: 2023-07-18
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SAFETY DATA SHEET

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

1.1 Product identifiers

Product name : Paraformaldehyde
Product Number : C104190
Brand : aladdin
CAS-No. : 30525-89-4

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

Identified uses : Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company : Shanghai Aladdin Biochemical Tech Co., Ltd
Address : 36 Xinjinqiao Road, Shanghai
Telephone : 400-620-6333
Fax : no data available

1.4 Emergency telephone number

Emergency Phone : 0532-83889090

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Flammable solids (Category 2), H228

Acute toxicity, Oral (Category 4), H302

Acute toxicity, Inhalation (Category 4), H332

Skin corrosion/irritation (Category 2), H315

Serious eye damage/eye irritation (Category 2A), H319

Skin sensitization (Category 1), H317

Germ cell mutagenicity (Category 2), H341

Carcinogenicity (Category 1B), H350

Specific target organ toxicity - single exposure (Category 1), H370

Specific target organ toxicity - single exposure (Category 3), respiratory tract irritation, H335

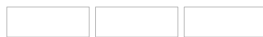
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Short-term (acute) aquatic hazard (Category 3), H402

Long-term (chronic) aquatic hazard (Category 3), H412

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

| | |
|-----------|---|
| H228 | Flammable solid |
| H315 | Causes skin irritation |
| H317 | May cause an allergic skin reaction |
| H319 | Causes serious eye irritation |
| H335 | May cause respiratory irritation |
| H341 | Suspected of causing genetic defects |
| H350 | May cause cancer |
| H370 | Causes damage to organs |
| H412 | Harmful to aquatic life with long lasting effects |
| H302+H332 | Harmful if swallowed or if inhaled |

Precautionary statement(s)

| | |
|----------------|--|
| P201 | Obtain special instructions before use. |
| P210 | Keep away from heat, hot surface, sparks, open flames and other ignition sources. - No smoking. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P240 | Ground/bond container and receiving equipment. |
| P241 | Use explosion-proof [electrical/ventilating/lighting/...] equipment. |
| P260 | Do not breathe dust/fume/gas/mist/vapors/spray. |
| P264 | Wash hands [and ...] thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P302+P352 | IF ON SKIN: wash with plenty of water. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing. |
| P308+P311 | IF exposed or concerned: Call a POISON CENTER/doctor/... |
| P333+P313 | IF SKIN irritation or rash occurs: Get medical advice/attention. |
| P337+P313 | IF eye irritation persists: Get medical advice/attention. |
| P370+P378 | In case of fire: Use ... to extinguish. |
| P405 | Store locked up. |
| P403+P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P501 | Dispose of contents/container to an approved waste disposal plant. |
| P301+P312+P330 | IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth. |
| P304+P340+P312 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor. if you feel unwell. |

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2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

SECTION 3: Composition/information on ingredients**3.1 Substances**

| | |
|------------------|--|
| Synonyms | : Paraform Polyoxymethylene Formagene Polymerized formaldehyde |
| Formula | : (CH ₂ O) _n |
| Molecular weight | : 30.03 |
| CAS No. | : 30525-89-4 |
| EC-NO. | : no data available |

| Component | Classification | Concentration |
|------------------|-------------------|---------------|
| Paraformaldehyde | no data available | 95% |

SECTION 4: First aid measures**4.1 Description of first aid measures****General advice**

Consult a physician. Show this material safety data sheet to the doctor in attendance.

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

Flush eyes with water as a precaution.

If swallowed

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

no data available

4.3 Indication of any immediate medical attention and special treatment needed

no data available

SECTION 5: Firefighting measures**5.1 Extinguishing media****Suitable extinguishing media**

Water Foam Carbon dioxide (CO₂) Dry powder

Unsuitable extinguishing media

no data available

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5.2 Special hazards arising from the substance or mixture

Carbon oxides Combustible. Development of hazardous combustion gases or vapours possible in the event of fire.

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.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool place. Keep the container tightly closed and store in a dry and ventilated place. Sensitive to humidity.

7.3 Specific end use(s)

no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

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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

Eyel/face protection

Face shield and safety glasses 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. The selected protective gloves have to satisfy the specifications of Regulation (EU)2016/425 and the standard EN 374 derived from it.

Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., 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 fullface particle respirator type N100 (US) or type P3 (EN 143) 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

If safety requires, prevent further leakage or spillage. Do not let the product enter the sewer.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | |
|---|-------------------|
| a) Appearance | no data available |
| b) Odour | no data available |
| c) Odour Threshold | no data available |
| d) pH | no data available |
| e) Melting point/freezing point | 156°C |
| f) Initial boiling point and boiling range | no data available |
| g) Flash point | 71°C |
| 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 |
| l) Vapour density | no data available |
| m) Relative density | no data available |
| n) Water solubility | no data available |
| o) Partition coefficient: n-octanol/water | no data available |
| p) Auto-ignition temperature | no data available |
| q) Decomposition temperature | no data available |
| r) Viscosity | no data available |
| s) Explosive properties N | no data available |

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t) Oxidizing properties N no data available

9.2 Other safety information

no data available

SECTION 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

Violent reactions possible with: bases Amines acids Strong oxidizing agents Oxygen (as liquefied gas)

10.4 Conditions to avoid

Exposure to moisture

10.5 Incompatible materials

Iron, Copper, Nickel, Zinc, various alloys

10.6 Hazardous decomposition products

no data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - 800 mg/kg

Remarks: (RTECS)

LC50 Inhalation - Rat - 4 h - 1.07 mg/l

Remarks: (RTECS)

Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract, Lung edema
Inhalation: Irritating to respiratory system.

LD50 Dermal - Rabbit - 10,000 mg/kg

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

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Causes serious eye damage.

Respiratory or skin sensitisation

Human experience Result: positive Remarks: (External MSDS)

Germ cell mutagenicity

Suspected of causing genetic defects. Test Type: Mutagenicity (mammal cell test): Result: positive Remarks: (Lit.)

Carcinogenicity

no data available

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

May cause respiratory irritation. - Respiratory system

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Additional Information

RTECS: RV0540000

May cause permanent eye injury. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. After absorption: Systemic effects: drop in blood pressure Other dangerous properties can not be excluded. This substance should be handled with particular care. Liver - Irregularities - Based on Human Evidence Liver - Irregularities - Based on Human Evidence

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - 46 - 78 mg/l - 96 h

Remarks: (ECOTOX Database)

Toxicity to daphnia and other aquatic invertebrates

EC50 - Daphnia magna (Water flea) - 42 mg/l - 24 h

Remarks: (External MSDS)

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

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12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

Reacts with water to form toxic decomposition products. Discharge into the environment must be avoided.

SECTION 13:**13.1 Disposal considerations****Product**

Recycle to process, if possible. Consult your local regional authorities and an expert of disposal. You may be able to dissolve or mix material with a combustible solvent and little by little burn in a chemical incinerator equipped with an afterburner and scrubber system. If a large amount of the substance is burned at a time, an explosion may occur. Observe all federal, state and local regulations when disposing of the substance.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information**DOT (US)**

UN number: 2213

Packing group: III

Class: 4.1

Proper shipping name:

Reportable Quantity(RQ): no data available Poison Inhalation Hazard: no data

PARAFORMALDEHYDE

Environmental Hazards: no

IMDG

UN number: 2213

Packing group: III

EMS-No: no data available

Proper shipping name: PARAFORMALDEHYDE

IATA

UN number: 2213

Packing group: III

Class: 4.1

Proper shipping name: PARAFORMALDEHYDE

SECTION 15: Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

SECTION 16: Other information**Further information**

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