

## Chemical Safety Data Sheet MSDS / SDS

**FORMALDEHYDE-D2**

Revision Date:2026-04-26 Revision Number:1

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

Product name : FORMALDEHYDE-D2  
CBnumber : CB7734892  
CAS : 1664-98-8  
EINECS Number : 216-775-5  
Synonyms : CD2O, FORMALDEHYDE-D2

**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**

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

P301+P312 IF SWALLOWED: call a POISON CENTER or doctor/physician IF you feel unwell.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continuerinsing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

**Hazard statements**

H315 Causes skin irritation

H317 May cause an allergic skin reaction

H319 Causes serious eye irritation

H331 Toxic if inhaled

H335 May cause respiratory irritation

H341 Suspected of causing genetic defects

H350 May cause cancer

---

## SECTION 3: Composition/information on ingredients

### Substance

|              |                         |
|--------------|-------------------------|
| Product name | : FORMALDEHYDE-D2       |
| Synonyms     | : CD2O, FORMALDEHYDE-D2 |
| CAS          | : 1664-98-8             |
| EC number    | : 216-775-5             |
| MF           | : CD2O                  |
| MW           | : 32.04                 |

---

## SECTION 4: First aid measures

### First Aid Measures

#### General advice

Immediate medical attention is required. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). If symptoms persist, call a physician.

#### Eye contact

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Call a physician immediately. If symptoms persist, call a physician.

#### Skin Contact

Wash off immediately with plenty of water. Wash contaminated clothing before reuse. If skin irritation persists, call a physician. Wash off immediately with soap and plenty of water.

Immediate medical attention is not required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

#### Inhalation

Remove to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Immediate medical attention is required. If not breathing, give artificial respiration. Artificial respiration and/or oxygen may be necessary. Call a physician. Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician.

#### Ingestion

Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Clean mouth with water and drink afterwards plenty of water. Call a physician.

#### Self-protection of the first aider

Remove all sources of ignition. Use personal protective equipment as required.

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

#### Symptoms

No information available.

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

### **Note to physicians**

May cause sensitization of susceptible persons. Treat symptomatically.

---

## **SECTION 5: Firefighting measures**

### **Suitable Extinguishing Media**

#### **Suitable Extinguishing Media**

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

#### **Unsuitable Extinguishing Media**

None.

### **Specific hazards arising from the chemical**

#### **Specific hazards arising from the chemical**

In the event of fire and/or explosion do not breathe fumes. May cause sensitization by inhalation and skin contact. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

#### **Hazardous combustion products**

Carbon oxides.

### **Explosion data**

#### **Sensitivity to Mechanical Impact**

No information available.

#### **Sensitivity to Static Discharge**

No information available.

### **Protective equipment and precautions for firefighters**

#### **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.

---

## **SECTION 6: Accidental release measures**

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

#### **Personal precautions**

Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required.

Keep people away from and upwind of spill/leak.

#### **Environmental precautions**

#### **Environmental precautions**

Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. See Section 12 for additional

Ecological Information. Should not be released into the environment.

## Methods and material for containment and cleaning up

### Methods for containment

Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.

### Methods for cleaning up

Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers. Soak up with inert absorbent material.

---

## SECTION 7: Handling and storage

### Precautions for safe handling

#### Advice on safe handling

Ensure adequate ventilation, especially in confined areas. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. All equipment used when handling the product must be grounded. Use with local exhaust ventilation. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray.

### Conditions for safe storage, including any incompatibilities

#### Storage Conditions

Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep containers tightly closed in a cool, well-ventilated place. Protect from moisture. Store at room temperature.

#### Incompatible materials

None known based on information supplied.

---

## SECTION 8: Exposure controls/personal protection

### Control parameters

#### Exposure Guidelines

.

#### Other Information

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

#### NIOSH IDLH Immediately Dangerous to Life or Health

### Appropriate engineering controls

#### Engineering Controls

Showers

Eyewash stations

Ventilation systems

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Tight sealing safety goggles. Face protection shield.

#### **Skin and Body Protection**

Wear protective gloves and protective clothing.

#### **Respiratory protection**

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

#### **General Hygiene Considerations**

When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.

---

## SECTION 9: Physical and chemical properties

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

|                              |                                        |
|------------------------------|----------------------------------------|
| Physical State               | liquid                                 |
| Appearance                   | No information available               |
| Odor                         | No information available               |
| pH                           | No information available               |
| Melting point/freezing point | No information available               |
| Boiling point                | 98 °C                                  |
| Flash point                  | 50 °C CC (closed cup)                  |
| Density                      | 1.1 g/mL                               |
| Evaporation rate             | No information available               |
| Upper flammability limits    | No information available               |
| Lower flammability limit     | 7%                                     |
| Vapor pressure               | No information available               |
| Vapor density                | No information available               |
| Specific gravity             | No information available               |
| Water solubility             | No information available               |
| Solubility in other solvents | No information available               |
| Partition coefficient        | No information available               |
| Autoignition temperature     | No information available               |
| Decomposition temperature    | No information available               |
| Kinematic viscosity          | No information available               |
| Explosive properties         | No information available               |
| Oxidizing properties         | No information available               |
| Solubility                   | Methanol (Slightly), Water (Sparingly) |

---

## SECTION 10: Stability and reactivity

### **Reactivity**

Not applicable

### **Chemical stability**

Stable under recommended storage conditions.

### **Possibility of Hazardous Reactions**

None under normal processing.

### **Hazardous polymerization**

No information available.

### **Conditions to avoid**

Heat, flames and sparks. Exposure to air or moisture over prolonged periods.

### **Incompatible materials**

Strong oxidizing agents.

### **Hazardous Decomposition Products**

Carbon oxides.

---

## **SECTION 11: Toxicological information**

### **Information on likely routes of exposure**

#### **Inhalation**

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

#### **Eye contact**

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

#### **Skin Contact**

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

#### **Ingestion**

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

### **Information on toxicological effects**

#### **Symptoms**

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

### **Delayed and immediate effects as well as chronic effects from short and long-term exposure**

#### **Chronic Toxicity**

Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure. Target Organ Effects Eyes, Respiratory system, Skin. Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

### **Numerical measures of toxicity - Product Information**

#### **Unknown acute toxicity**

0% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document

**ATEmix (oral)**

500

**ATEmix (dermal)**

1350

**ATEmix (inhalation-dust/mist)**

2.5

**ATEmix (inhalation-vapor)**

2.9

---

## SECTION 12: Ecological information

**Ecotoxicity**

May cause long lasting harmful effects to aquatic life

0% of the mixture consists of component(s) of unknown hazards to the aquatic environment.

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Mobility**

No information available.

---

## SECTION 13: Disposal considerations

**Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations. Should not be released into the environment.

**Contaminated packaging**

Do not reuse container.

**Other Information**

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

**US EPA Waste Number**

D002 U122

**California Hazardous Waste Status**

This product contains one or more substances that are listed with the State of California as a hazardous waste.

---

## SECTION 14: Transport information

### DOT

**UN/ID no**

UN2209

**Hazard Class**

8

**Packing Group**

III

**Proper shipping name**

Formaldehyde, solutions

**Description**

UN2209, Formaldehyde, solutions, 8, III

### IMDG

**UN/ID no**

UN2209

**Hazard Class**

8

**Packing Group**

III

**Proper shipping name**

Formaldehyde solution

**Description**

UN2209, Formaldehyde solution, 8, III

**EmS-No**

F-A, S-B

### IATA

**UN/ID no**

UN2209

**Hazard Class**

8

**Packing Group**

III

**Proper shipping name**

Formaldehyde solution

**Description**

UN2209, Formaldehyde solution, 8, III

---

## SECTION 15: Regulatory information

### International Inventories

All of the components in the product are on the following Inventory lists

Europe (EINECS/ELINCS/NLP)

X - Listed

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

| Chemical name   | TSCA | DSL | NDL | EINECS | ELINCS | ENCS | IECSC | KECL | PICCS | AICS |
|-----------------|------|-----|-----|--------|--------|------|-------|------|-------|------|
| Water           | X    | X   | -   | X      | -      | -    | X     | X    | X     | X    |
| Formaldehyde-d2 | -    | -   | -   | X      | -      | -    | -     | -    | -     | -    |

## US Federal Regulations

### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

### SARA 311/312 Hazard Categories

#### Acute health hazard

Yes

#### Chronic Health Hazard

No

#### Fire hazard

Yes

#### Sudden release of pressure hazard

No

#### Reactive hazard

No

### CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

## US State Regulations

### California Proposition 65

This product does not contain any Proposition 65 chemicals.

## U.S. State Right-to-Know Regulations

---

## SECTION 16: Other information

## **Abbreviations and acronyms**

CAS: Chemical Abstracts Service

TWA: Time-Weighted Average

STEL: Short-Term Exposure Limit

LD50: Lethal Dose 50%

LC50: Lethal Concentration 50%

EC50: Effective Concentration 50%

PEL: Permissible Exposure Limit

TLV: Threshold Limit Value

IMDG: International Maritime Dangerous Goods Code

IATA: International Air Transport Association

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

DOT: US Department of Transportation

NFPA: National Fire Protection Association

NIOSH: National Institute for Occupational Safety and Health

OSHA: Occupational Safety and Health Administration

### **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.