

# Safety Data Sheet

acc. to OSHA HCS

Printing date 11/03/2025

Reviewed on 11/03/2025

## 1 Identification

- **Product identifier**
- **Trade name:** Formaldehyde 4%  
w/w Solution
- **Article number:** 213-00
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
OFI Testing Equipment Inc.  
11302 Steeplecrest Dr.  
Houston, TX 77065  
(877) 837-8683
- **Information department:** techservices@ofite.com
- **Emergency telephone number:**  
INFOTRAC USA - CANADA: 1-800-535-5053  
INTERNATIONAL: 1-352-323-3500



## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Germ Cell Mutagenicity 2 H341 Suspected of causing genetic defects.  
Carcinogenicity 1A H350 May cause cancer.



GHS07

Sensitization - Skin 1 H317 May cause an allergic skin reaction.

- **Label elements**

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS07



GHS08

- **Signal word** Danger

- **Hazard-determining components of labeling:**

Formaldehyde

- **Hazard statements**

May cause an allergic skin reaction.  
Suspected of causing genetic defects.  
May cause cancer.

- **Precautionary statements**

Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Contaminated work clothing must not be allowed out of the workplace.

(Contd. on page 2)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 11/03/2025

Reviewed on 11/03/2025

**Trade name: Formaldehyde 4%  
w/w Solution**

(Contd. of page 1)

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

*If on skin: Wash with plenty of water.*

*IF exposed or concerned: Get medical advice/attention.*

*Specific treatment (see on this label).*

*If skin irritation or rash occurs: Get medical advice/attention.*

*Wash contaminated clothing before reuse.*

*Store locked up.*

*Dispose of contents/container in accordance with local/regional/national/international regulations.*

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 2

Fire = 1

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 2

Fire = 1

Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

### 3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 50-00-0	Formaldehyde	4.0%
--------------	--------------	------

· **Table of Nonhazardous Ingredients**

CAS: 7732-18-5	Water	96.0%
----------------	-------	-------

### 4 First-aid measures

· **Description of first aid measures**

· **After inhalation:**

*Supply fresh air and to be sure call for a doctor.*

*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.

· **After swallowing:** If symptoms persist consult 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.*

US

(Contd. on page 3)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 11/03/2025

Reviewed on 11/03/2025

**Trade name: Formaldehyde 4%  
w/w Solution**

(Contd. of page 2)

## 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Dilute with plenty of water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to section 13.  
Ensure adequate ventilation.
- **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.
- **Protective Action Criteria for Chemicals**

· <b>PAC-1:</b>		
CAS: 50-00-0	Formaldehyde	0.90 ppm
· <b>PAC-2:</b>		
CAS: 50-00-0	Formaldehyde	14 ppm
· <b>PAC-3:</b>		
CAS: 50-00-0	Formaldehyde	56 ppm

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **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.

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see section 7.

(Contd. on page 4)

-US

# Safety Data Sheet

acc. to OSHA HCS

Printing date 11/03/2025

Reviewed on 11/03/2025

**Trade name: Formaldehyde 4%  
w/w Solution**

(Contd. of page 3)

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

**CAS: 50-00-0 Formaldehyde**

PEL	Short-term value: 2 ppm Long-term value: 0.75 ppm see 29 CFR 1910.1048(c)
REL	Long-term value: 0.016 ppm Ceiling limit value: 0.1* ppm *15-min; See Pocket Guide App. A
TLV	Short-term value: 0.37 mg/m <sup>3</sup> , 0.3 ppm Long-term value: 0.12 mg/m <sup>3</sup> , 0.1 ppm DSEN; RSEN, A1

· **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.

Store protective clothing separately.

· **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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **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

· **Body protection:** Protective work clothing

US

(Contd. on page 5)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 11/03/2025

Reviewed on 11/03/2025

**Trade name: Formaldehyde 4%  
w/w Solution**

(Contd. of page 4)

## 9 Physical and chemical properties

· <i>Information on basic physical and chemical properties</i>	
· <i>General Information</i>	
· <i>Appearance:</i>	
<i>Form:</i>	Liquid
<i>Color:</i>	Colorless
· <i>Odor:</i>	Characteristic
· <i>Odor threshold:</i>	Not determined.
· <i>pH-value:</i>	Not determined.
· <i>Change in condition</i>	
<i>Melting point/Melting range:</i>	0 °C (32 °F)
<i>Boiling point/Boiling range:</i>	100 °C (212 °F)
· <i>Flash point:</i>	Not applicable.
· <i>Flammability:</i>	Not applicable.
· <i>Decomposition temperature:</i>	Not determined.
· <i>Ignition temperature:</i>	Product is not selfigniting.
· <i>Danger of explosion:</i>	Product does not present an explosion hazard.
· <i>Explosion limits:</i>	
<i>Lower:</i>	Not determined.
<i>Upper:</i>	Not determined.
· <i>Vapor pressure at 20 °C (68 °F):</i>	23 hPa (17.3 mm Hg)
· <i>Density at 20 °C (68 °F):</i>	1 g/cm <sup>3</sup> (8.345 lbs/gal)
· <i>Relative density</i>	Not determined.
· <i>Vapor density</i>	Not determined.
· <i>Evaporation rate</i>	Not determined.
· <i>Solubility in / Miscibility with</i>	
<i>Water:</i>	Fully miscible.
· <i>Partition coefficient (n-octanol/water):</i> Not determined.	
· <i>Viscosity:</i>	
<i>Dynamic:</i>	Not determined.
<i>Kinematic:</i>	Not determined.
· <i>Solvent content:</i>	
<i>Organic solvents:</i>	4.0 %
<i>Water:</i>	96.0 %
<i>VOC content:</i>	4.00 %
	40.0 g/l / 0.33 lb/gal
<i>Solids content:</i>	0.0 %
· <i>Other information</i>	No further relevant information available.

## 10 Stability and reactivity

· *Reactivity* No further relevant information available.

(Contd. on page 6)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 11/03/2025

Reviewed on 11/03/2025

**Trade name: Formaldehyde 4%  
w/w Solution**

(Contd. of page 5)

- **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.

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

### ATE (Acute Toxicity Estimate)

Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	7,500 mg/kg
Inhalative	LC50/4h	75 mg/l

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**  
The product shows the following dangers according to internally approved calculation methods for preparations:  
Irritant

- **Carcinogenic categories**

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

CAS: 50-00-0	Formaldehyde	I
--------------	--------------	---

- **NTP (National Toxicology Program)**

CAS: 50-00-0	Formaldehyde	K
--------------	--------------	---

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

CAS: 50-00-0	Formaldehyde
--------------	--------------

## 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:** Not hazardous for water.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

US

(Contd. on page 7)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 11/03/2025

Reviewed on 11/03/2025

**Trade name: Formaldehyde 4%  
w/w Solution**

(Contd. of page 6)

## 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.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

## 14 Transport information

<b>· UN-Number</b>	
<b>· DOT, ADN, IMDG, IATA</b>	Not regulated
<b>· UN proper shipping name</b>	
<b>· DOT, ADN, IMDG, IATA</b>	Not regulated
<b>· Transport hazard class(es)</b>	
<b>· DOT, ADN, IMDG, IATA</b>	
<b>· Class</b>	Not regulated
<b>· Packing group</b>	
<b>· DOT, IMDG, IATA</b>	Not regulated
<b>· Environmental hazards:</b>	
<b>· Marine pollutant:</b>	No
<b>· Special precautions for user</b>	Not applicable.
<b>· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
<b>· UN "Model Regulation":</b>	Not regulated

## \* 15 Regulatory information

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

<b>· Section 355 (extremely hazardous substances):</b>	
CAS: 50-00-0	Formaldehyde
<b>· Section 313 (Specific toxic chemical listings):</b>	
CAS: 50-00-0	Formaldehyde
<b>· TSCA (Toxic Substances Control Act):</b>	
Water	ACTIVE
Formaldehyde	ACTIVE
<b>· Hazardous Air Pollutants</b>	
CAS: 50-00-0	Formaldehyde

(Contd. on page 8)

US

# Safety Data Sheet

acc. to OSHA HCS

Printing date 11/03/2025

Reviewed on 11/03/2025

**Trade name: Formaldehyde 4%  
w/w Solution**

(Contd. of page 7)

· **Proposition 65**

· **Chemicals known to cause cancer:**

CAS: 50-00-0	Formaldehyde
--------------	--------------

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

CAS: 50-00-0	Formaldehyde	B1
--------------	--------------	----

· **TLV (Threshold Limit Value)**

CAS: 50-00-0	Formaldehyde	A2
--------------	--------------	----

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

CAS: 50-00-0	Formaldehyde
--------------	--------------

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS07    GHS08

· **Signal word** *Danger*

· **Hazard-determining components of labeling:**

Formaldehyde

· **Hazard statements**

May cause an allergic skin reaction.  
Suspected of causing genetic defects.  
May cause cancer.

· **Precautionary statements**

Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Contaminated work clothing must not be allowed out of the workplace.  
Wear protective gloves/protective clothing/eye protection/face protection.  
If on skin: Wash with plenty of water.  
IF exposed or concerned: Get medical advice/attention.  
Specific treatment (see on this label).  
If skin irritation or rash occurs: Get medical advice/attention.  
Wash contaminated clothing before reuse.  
Store locked up.  
Dispose of contents/container in accordance with local/regional/national/international regulations.

· **National regulations:**

· **Additional classification according to Decree on Hazardous Materials:**

Carcinogenic hazardous material group III (dangerous).

(Contd. on page 9)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 11/03/2025

Reviewed on 11/03/2025

**Trade name: Formaldehyde 4%  
w/w Solution**

(Contd. of page 8)

- **Information about limitation of use:**  
*Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.*
- **Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.*

### 16 Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

- **Department issuing SDS:** *Environment protection department.*

- **Contact:**

*Date of Preparation / Last Revision:*

- **Date of preparation / last revision**

*Revision 1.2, 11-03-2025: Reviewed SDS for accuracy. STN*

*Revision 0.0, 09-04-2024: Creation date for SDS. STN*

*11/03/2025 / -*

- **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*

*ELINCS: European List of Notified Chemical Substances*

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

*NFPA: National Fire Protection Association (USA)*

*HMIS: Hazardous Materials Identification System (USA)*

*VOC: Volatile Organic Compounds (USA, EU)*

*LC50: Lethal concentration, 50 percent*

*LD50: Lethal dose, 50 percent*

*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*

*Sensitization - Skin 1: Skin sensitisation – Category 1*

*Germ Cell Mutagenicity 2: Germ cell mutagenicity – Category 2*

*Carcinogenicity 1A: Carcinogenicity – Category 1A*

- **\* Data compared to the previous version altered.**