

# Safety Data Sheet

According to Hazardous Products Regulation (SOR/2015-17)

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

### Product identifier

Trade name/designation:	Formalin 10% v/v
Product No.:	41916
Synonyms:	no data available
CAS No.:	not applicable
Other means of identification:	

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

Recommended Use:	For Further Manufacturing Use Only
Uses advised against:	Not for Human or Animal Drug Use

### Details of the supplier of the safety data sheet

*Canada*

### Supplier

#### **VWR International LLC**

Street	100 Matsonford Road Radnor Corporate Center, Building One, Suite 200 P. O. Box 6660
Postal code/city	Radnor, PA 19087
Telephone	+1-800-932-5000 toll-free within US/CA +1-610-386-1700
Telefax	+1-610-728-2103

## Manufacturer

### VWR International Co.

Street 2360 Argentia Road  
Postal code/city Mississauga, Ontario, L5N 5Z7

### Emergency telephone

Telephone +1-613-996-6666 (Canutec, 24 hrs/day, 7 days/week, Canada)

### Preparation Information

VWR International - Data Compliance

E-mail sds@vwr.com

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

#### Classification according to Hazardous Products Regulation (SOR/2015-17)

Hazard classes and hazard categories	Hazard statements
Carcinogenicity, category 1B	H350
Germ cell mutagenicity, category 2	H341
Acute toxicity, category 4, oral and inhalation	H302+H332
Eye irritation, category 2	H319
Skin irritation, category 2	H315
Specific target organ toxicity (single exposure), category 3, vascular	H335
Skin sensitization, category 1	H317

### 2.2 Label elements

#### Labelling in accordance with (SOR/2015-17)

#### Hazard pictograms



Signal word: Danger

Hazard statements	
H350	May cause cancer.
H341	Suspected of causing genetic defects.
H302+H332	Harmful if swallowed or if inhaled.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H317	May cause an allergic skin reaction.

Precautionary statements	
P201	Obtain special instructions before use.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water/...
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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+P313	IF exposed or concerned: Get medical advice/attention.

Other hazards

**Hazards not otherwise classified (HNOC)**

no data available

### SECTION 3: Composition / information on ingredients

#### 3.1 Substances

not applicable

#### 3.2 Mixtures

**Hazardous ingredients GHS Classification in accordance with (SOR/2015-17)**

Substance name	Concentration	Product identifier	Hazard classes and hazard categories
Formaldehyde	3 - 5 %	CAS No.: 50-00-0	Carc. 2 - H351 Acute Tox. 3 - H301+H311+H331 Skin Corr. 1B - H314 Skin Sens. 1 - H317
Methanol	1 - 2 %	CAS No.: 67-56-1	Flam. Liq. 2 - H225 Acute Tox. 3 - H301+H311+H331 STOT SE 1 - H370

### SECTION 4: First aid measures

#### 4.1 General information

no data available

**After inhalation**

no data available

**In case of skin contact**

no data available

**After eye contact**

no data available

**In case of ingestion**

no data available

#### 4.2 Most important symptoms/effects, acute and delayed

no data available

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

no data available

#### 4.4 Self-protection of the first aider

no data available

#### 4.5 Information to physician

no data available

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

Suitable extinguishing media

no data available

Extinguishing media which must not be used for safety reasons

no data available

#### 5.2 Specific hazards arising from the chemical

no data available

#### 5.3 Advice for firefighters

no data available

#### 5.4 Additional information

no data available

### SECTION 6: Accidental release measures

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

no data available

#### 6.2 Environmental precautions

no data available

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

no data available

#### 6.4 Additional information

no data available

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

no data available

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

storage temperature: no data available

Storage class: no data available

no data available

### 7.3 Specific end use(s)

no data available

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Ingredient (Designation)	Regulatory information	Country	Limit value type (country of origin)	Limit value
Methanol	Gestis	CA	LTV	262 mg/m <sup>3</sup> - 200 ppm
Methanol	Gestis	CA	STV	328 mg/m <sup>3</sup> - 250 ppm

### 8.2 Engineering controls

#### Appropriate engineering controls

no data available

#### Personal protection equipment (PPE)

no data available

#### *Eye/face protection*

no data available

#### *Skin protection*

no data available

#### By short-term hand contact

Suitable material: no data available

Thickness of the glove material: no data available

Breakthrough time (maximum wearing time): no data available

#### By long-term hand contact

Suitable material: no data available

Thickness of the glove material: no data available

Breakthrough time (maximum wearing time): no data available

#### *Respiratory protection*

no data available

#### *Additional information*

no data available

#### *Environmental exposure controls*

no data available

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

(a) Appearance	
Physical state:	liquid
Color:	colorless
(b) Odour:	no data available
(c) Odour threshold:	no data available

#### Safety relevant basic data

(d) pH:	no data available
(e) Melting point/freezing point:	no data available
(f) Initial boiling point and boiling range:	no data available
(g) Flash point:	no data available
(h) Evaporation rate:	no data available
(i) Flammability (solid, gas):	not applicable
(j) Flammability or explosive limits	
Lower explosion limit:	no data available
Upper explosion limit:	no data available
(k) Vapour pressure:	no data available
(l) Vapour density:	no data available
(m) Relative density:	no data available
(n) Solubility(ies)	
Water solubility (g/L):	no data available
Soluble (g/L) in Ethanol:	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	
Kinematic viscosity:	no data available
Dynamic viscosity:	no data available
(s) Explosive properties:	not applicable
(t) Oxidising properties:	not applicable

### 9.2 Other information

Bulk density:	not applicable
Refraction index:	no data available
Dissociation constant:	no data available
Surface tension:	no data available
Henry constant:	no data available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

no data available

## 10.2 Chemical stability

no data available

## 10.3 Possibility of hazardous reactions

no data available

## 10.4 Conditions to avoid

no data available

## 10.5 Incompatible materials

no data available

## 10.6 Hazardous decomposition products

no data available

## 10.7 Additional information

no data available

# SECTION 11: Toxicological information

## 11.1 Information on toxicological effects

### Acute effects

#### *Acute oral toxicity:*

Formaldehyde - LD50: > 100 mg/kg - Rat - (CHP)

Methanol - LD50: > 5628 mg/kg - Rat - (IUCLID)

Methanol - LDLo: > 143 mg/kg - Human - (RTECS)

#### *Acute dermal toxicity:*

Formaldehyde - LD50: > 270 mg/kg - Rabbit - (CHP)

Methanol - LD50: > 15800 mg/kg - Rabbit

#### *Acute inhalation toxicity:*

Formaldehyde - LC50: > 0.578 mg/l (4h) - Rat - (CHP)

Methanol - TCLo: > 160 ppm (4h) - Human

### Irritant and corrosive effects

#### *Primary irritation to the skin:*

Causes skin irritation.

#### *Irritation to eyes:*

Causes serious eye irritation.

#### *Irritation to respiratory tract:*

May cause respiratory irritation.

**Respiratory or skin sensitization**

In case of skin contact: Sensitising  
After inhalation: not sensitising

**STOT-single exposure**

May cause respiratory irritation.

**STOT-repeated exposure**

not applicable

**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

**Carcinogenicity**

The table below indicates whether each agency has listed any ingredient as a carcinogen.

no data available	ACGIH	IARC	NTP	OSHA

**Germ cell mutagenicity**

Suspected of causing genetic defects.

**Reproductive toxicity**

No indications of human reproductive toxicity exist.

**Aspiration hazard**

not applicable

**Other adverse effects**

no data available

**Additional information**

no data available

**SECTION 12: Ecological information**

**12.1 Ecotoxicity**

**Fish toxicity:**

Formaldehyde - LC50: 52.5 mg/l (96 h)

Methanol - LC50: 24000 mg/l (96 h) - Poirier, S.H., M.L. Knuth, C.D. Anderson-Buchou, L.T. Brooke, A.R. Lima, and P.J. Shubat 1986. Comparative Toxicity of Methanol and N,N-Dimethylformamide to Freshwater Fish and Invertebrates. Bull. Environ. Contam. Toxicol. 37(4):615-621

**Daphnia toxicity:**

Formaldehyde - LC50: 1070 mg/l (48 h)

Formaldehyde - EC50: 14 mg/l (48 h)



Methanol - LC50: 3290 mg/l (48 h) - Guilhermino, L., T. Diamantino, M.C. Silva, and A.M.V.M. Soares 2000. Acute Toxicity Test with Daphnia magna: An Alternative to Mammals in the Prescreening of Chemical Toxicity?. Ecotoxicol.Environ.Saf. 46(3):357-362

Methanol - EC50: 24500 mg/l (48 h) - Randall, T.L., and P.V. Knopp 1980. Detoxification of Specific Organic Substances by Wet Oxidation. J.Water Pollut.Control Fed. 52(8):2117-2130

**Algae toxicity:**

no data available

**Bacteria toxicity:**

no data available

## 12.2 Persistence and degradability

no data available

## 12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water: no data available

## 12.4 Mobility in soil:

no data available

## 12.5 Results of PBT/vPvB assessment

no data available

## 12.6 Other adverse effects

no data available

# SECTION 13: Disposal considerations

## 13.1 Waste treatment methods

**Appropriate disposal / Product**

no data available

Waste code product: no data available

**Appropriate disposal / Package**

no data available

**Additional information**

no data available

# SECTION 14: Transport information

## Land transport (DOT)

No dangerous good in sense of these transport regulations.

**Sea transport (IMDG)**

**No dangerous good in sense of these transport regulations.**



## Air transport (ICAO-TI / IATA-DGR)

UN-No.:	3334
Proper Shipping Name:	(FORMALDEHYDE)
Class(es):	9
Classification code:	
Hazard label(s):	9
Packing group:	III
Special precautions for user:	

## SECTION 15: Regulatory information

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

Domestic Substance List:

## SECTION 16: Other information

### Abbreviations and acronyms

ACGIH - American Conference of Governmental Industrial Hygienists  
 DOT - Department of Transportation  
 IARC - International Agency for Research on Cancer  
 IATA-DGR - International Air Transport Association-Dangerous Goods Regulations  
 ICAO-TI - International Civil Aviation Organization-Technical Instructions  
 IMDG - International Maritime Code for Dangerous Goods  
 LTV - Long Term Value  
 NIOSH - National Institute for Occupational Safety and Health  
 NTP - National Toxicology Program  
 OSHA - Occupational Safety & Health Administration  
 PBT - Persistent, Bioaccumulative and Toxic  
 PEL - Permissible Exposure Limit  
 STV - Short Term Value  
 SVHC - Substances of Very High Concern  
 TLV - Threshold Limit Value  
 vPvB - very Persistent, very Bioaccumulative  
 ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road  
 AGS - Committee on Hazardous Substances (Ausschuss für Gefahrstoffe)  
 CLP - Regulation on Classification, Labelling and Packaging of Substances and Mixtures  
 DFG - German Research Foundation (Deutsche Forschungsgemeinschaft)  
 Gestis - Information system on hazardous substances of the German Social Accident Insurance (Gefahrstoffinformationssystem der Deutschen Gesetzlichen Unfallversicherung)  
 RID - Regulation concerning the International Carriage of Dangerous Goods by Rail

### Additional information

Indication of changes: general update

*The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guidance. The information in this document is based on the present state knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. VWR International and his Affiliates shall not be held liable for any damage resulting from handling.*

