

Revision date: 04 June 2015

Version: 01

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

1.1. Product identifier:

Trade name/designation: Embalming Fluid
 Other means of identification: Not applicable

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

Relevant identified uses: For educational use only

1.3. Details of the supplier of the safety data sheet:

Company:	Ward's Science	Boreal Science
	Division of VWR International, LLC	Division of VWR International Co.
	5100 West Henrietta Road	399 Vansickle Road
	P.O. Box 92912	St. Catherines, Ontario
	Rochester, NY 14692-9012	L2S 3T4 Canada
Telephone:	800.962.2660	800.387.9393

1.4. Emergency Telephone numbers:

CHEMTREC 800.424.9300
 CANUTEC 613.996.6666

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

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

For the full text of the H-Statement(s) and R-phrase(s) mentioned in this Section, see Section 16.

Hazard statements	Hazard classes and categories
H301	Acute toxicity, oral (category 1)
H227	Flammable liquids (category 4)
H311	Acute toxicity, dermal (category 3)
H331	Acute toxicity, inhalation (category 3)
H314	Skin corrosion/irritation (Category 1A, B, C)
H318	Serious eye damage/eye irritation (category 1)
H317	Sensitization, Skin (category 1)
H341	Germ Cell mutagenicity (category 2)
H350	Carcinogenicity (category 1A, 1B)
H370	Specific target organ toxicity, single exposure (category 1)
H402	Hazardous to the aquatic environment, acute hazard (category 3)

2.2. GHS Label elements, including precautionary statements

Pictograms:



Signal word: Danger

Hazard statements	
H301	Toxic if swallowed
H227	Combustible liquid
H311	Toxic in contact with skin
H331	Toxic if inhaled
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H317	May cause an allergic skin reaction
H341	Suspected of causing genetic defects
H350	May cause cancer
H370	Causes damage to organs
H402	Harmful to aquatic life
Precautionary statements	
P201	Obtain special instructions before use
P202	Do not handle until all safety precautions have been read and understood
P210	Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P264	Wash hands 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
P310	Immediately call a POISON CENTER or doctor/physician
P330	Rinse mouth
P301+P310+P330	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.
P304+P340+P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
P305+P351+P338+P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P307+P311	IF exposed: call a POISON CENTER or doctor/physician.
P362	Take off contaminated clothing and wash before reuse.
P370+P378	In case of fire: Use water spray for extinction.
P403+P235	Store in a well-ventilated place. Keep cool.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.
P304 + P340	IF INHALED: Remove victim to fresh air and Keep at rest in a position 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
P333 + P313	IF SKIN irritation or rash occurs: Get medical advice/attention.
P405	Store locked up.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed
P501	Dispose of contents/container according to appropriate disposal methods

2.3. WHMIS Classification:

WHMIS classification	Statement
D1B	Toxic Material at $\geq 1\%$ (ingestion)
B3	Combustible Liquid
D2A	Very Toxic Material at $\geq 0.1\%$ (carcinogen)
D2B	Toxic Material at $\geq 1\%$ (mutagen)
E	Corrosive Material at $\geq 1\%$ (skin)

2.4. Hazards not otherwise classified (HNOC) or not covered by GHS or WHMIS:

Lachrymator

SECTION 3: Composition/information on ingredients

3.1. Hazard components

Chemical name	Formula	Molecular weight	CAS#	Weight %
Formaldehyde	CH ₂ O	30.03 g/mol	50-00-0	3-4
Phenol	C ₆ H ₆ O	94.11 g/mol	108-95-2	2.8
Ethylene Glycol	C ₂ H ₆ O ₂	62.07 g/mol	107-21-1	5.5
Water	H ₂ O	18.02 g/mol	7732-18-5	87.70-88.70

SECTION 4: First aid measures

4.1. General information

- In case of inhalation:** 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:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
- In case of ingestion:** Do NOT induce vomiting. 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:

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.

4.3. Indication of any immediate medical attention and special treatment needed:

No data available

SECTION 5: Firefighting measures

- 5.1. Extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- 5.2. Special hazards arising from the substance or mixture:** No data available
- 5.3. Special protective equipment for firefighters:**
Wear self-contained breathing apparatus for firefighting if necessary.
- 5.4. Hazardous combustion products:** No data available
- 5.5. Advice for firefighters:** Wear self-contained breathing apparatus for firefighting if necessary.
- 5.6. Additional information:** No data available

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. For personal protection see section 8.

- 6.2. Environmental precautions:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3. Methods and material for containment and cleaning up:

Contain spillage, and then collect with an electrically protected vacuum cleaner or by

wet-brushing and place in container for disposal according to local regulations (see section 13).

6.4. Additional information: For disposal see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling: Use proper personal protective equipment.

7.2. Conditions for safe storage, including any incompatibilities:
Keep containers tightly closed in a cool, well-ventilated place.

7.3. Specific end use(s): No data available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

United States			
Chemical Name	Limit value type & Country of Origin	Exposure Limit value	Source
Formaldehyde	TWA (U.S.A.)	0.30ppm	ACGIH (TLV)
	PEL (U.S.A.)	0.75ppm	OSHA
	TWA (U.S.A.)	0.016ppm	NIOSH
Phenol	PEL (U.S.A.)	5ppm (skin)	OSHA
	TWA (U.S.A.)	5ppm (skin)	ACGIH (TLV)
Ethylene Glycol	PEL (U.S.A.)	50ppm	OSHA
	TWA (U.S.A.)	50ppm	ACGIH (TLV)
Canada			
Chemical Name	Limit value type & Country of Origin	Exposure Limit value	Source
Formaldehyde	TWA (Canada)	0.75ppm	OSHA (Table 2: OEL)
	TWA (Canada)	0.30ppm	British Columbia OEL
	STEL (Canada)	2.0ppm; 3.0 mg/m ³	Quebec OEL
Phenol	TWA (Canada)	5ppm (skin)	British Columbia OEL
	STEL (Canada)	5ppm (skin)	Quebec OEL
Ethylene Glycol	TWA (Canada)	50ppm	British Columbia OEL
	STEL (Canada)	50ppm	Quebec OEL

8.2. Exposure controls:

Appropriate engineering controls: Avoid contact with skin, eyes, and clothing.

Eye/face protection: Safety glasses with side-shields conforming to EN166
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.

Body protection: Impervious 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: For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure: Do not let product enter drains

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

- a) Appearance
 - Physical state: Liquid
 - Color: No data available
- b) Odor: No data available
- c) Odor Threshold: No data available
- d) pH: No data available
- e) Melting point: No data available
- f) Freezing point: No data available
- g) Boiling point: >100°C
- h) Boiling range: No data available
- i) Flash point: >98°C
- j) Evaporation rate: <1
- k) Flammability limits
 - Upper: No data available
 - Lower: No data available
- l) Explosive limits
 - Upper: No data available
 - Lower: No data available
- m) Vapor pressure: >1.0
- n) Vapor density: No data available
- o) Relative density: <1.0
- p) Solubility: Completely in water
- q) Partition coefficient (n-Octanol/Water):
No data available
- r) Auto-ignition temperature:
No data available
- s) Decomposition temperature:
No data available

- t) Viscosity: No data available
- u) Explosive properties: No data available
- v) Oxidizing properties: No data available

9.2. Other information: No data available

SECTION 10: Stability and Reactivity

- 10.1. Reactivity:** No data available
- 10.2. Chemical stability:** Stable under normal storage conditions
- 10.3. Possibility of hazardous reactions:** No data available
- 10.4. Conditions to avoid:** Strong oxidizing agents
- 10.5. Incompatible materials:** Hydrochloric acid
- 10.6. Hazardous decomposition products:** No data available

SECTION 11: Toxicology

11.1. Information on toxicological effects

Acute toxicity

Oral LD₅₀: No data available

Inhalation LC₅₀: No data available

Dermal LD₅₀: No data available

Other information on acute toxicity: No data available

Skin corrosion/irritation: No data available

Serious eye damage/eye irritation: No data available

Respiratory or skin sensitization: No data available

Germ cell mutagenicity: No data available

Carcinogenicity: IARC: Group A2: possible carcinogen

NTP: No data available

OSHA: No data available

Reproductive toxicity: No data available

Specific target organ toxicity-single exposure: No data available

Specific target organ toxicity-repeated exposure: No data available

Aspiration hazard: No data available

Additional information: No data available

SECTION 12: Ecological information

- 12.1. Ecotoxicity:** No data available
- 12.2. Persistence and degradability:** No data available
- 12.3. Bioaccumulative potential:** No data available

12.4. Mobility in soil: No data available

12.5. Results of PBT and vPvB assessment: No data available

12.6. Other adverse effects: No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods: Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging: Dispose of as unused product.

SECTION 14: Transport information

Land Transport DOT (U.S.)

UN Number: 2209

Proper Shipping name: Formaldehyde solutions

Transport Hazard Class: 8

Packing Group: III

Reportable Quantity (RQ): 263lbs

Sea Transport IMDG

UN Number: 2209

Proper Shipping name: Formaldehyde solutions

Transport Hazard Class: 8

EMS- No.: F-A, S-B

Packing Group: III

Transportation of Dangerous Goods (TDG)

UN Number: 2209

Proper Shipping name: Formaldehyde solutions

Transport Hazard Class: 8

Packing Group: III

Air Transport IATA

UN Number: 2209

Proper Shipping name: Formaldehyde solutions

Transport Hazard Class: 8

Packing Group: III

SECTION 15: Regulatory information

WHMIS Classification :

WHMIS classification	Statement
D1B	Toxic Material at $\geq 1\%$ (ingestion)
D2A	Very Toxic Material at $\geq 0.1\%$ (carcinogen)
D2B	Toxic Material at $\geq 1\%$ (mutagen)
E	Corrosive Material at $\geq 1\%$ (skin)

OSHA Hazards: Toxic, corrosive, carcinogen

SARA 302 Extremely Hazardous Substances: The following chemicals are subject to the reporting requirements of SARA Title III, Section 302:

Chemical Name	CAS#	Revision Date
Formaldehyde	50-00-0	01 Jul 2007

SARA 313 (TRI reporting): The following chemicals are subject to the reporting requirements of SARA Title III, Section 313:

Chemical Name	CAS#	Revision Date
Formaldehyde	50-00-0	01 Jul 2007
Methanol	67-56-1	01 Jul 2007

SARA 311/312 Hazardous Chemicals: Acute Health Hazard, Chronic Health Hazard

Massachusetts Right-To-Know Substance List:

Chemical Name	CAS#	Revision Date
Formaldehyde	50-00-0	01 Jul 2007
Methanol	67-56-1	01 Jul 2007

Pennsylvania Right-To-Know Hazardous substances:

Chemical Name	CAS#	Revision Date
Formaldehyde	50-00-0	01 Jul 2007
Methanol	67-56-1	01 Jul 2007

New Jersey Worker and Community Right-To-Know Components:

Chemical Name	CAS#	Revision Date
Formaldehyde	50-00-0	01 Jul 2007
Methanol	67-56-1	01 Jul 2007

California Proposition 65: WARNING! This product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

Chemical Name	CAS#	Revision Date
Formaldehyde	50-00-0	28 Sep 2007
Methanol	67-56-1	01 Jul 2007

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

SECTION 16: Other information

Full text of H-Statement(s) and P-phrase(s): see Section 2.2.

H301	Toxic if swallowed
H227	Combustible liquid

H311	Toxic in contact with skin
H331	Toxic if inhaled
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H317	May cause an allergic skin reaction
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P260	Do not breathe dust/fume/gas/mist/vapors/spray.
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P273	Avoid release to the environment
P280	Wear protective gloves/protective clothing/eye protection/face protection
P310	Immediately call a POISON CENTER or doctor/physician
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P301+P310+P330	IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Rinse mouth.
P304+P340+P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.
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P307+P311	IF exposed: call a POISON CENTER or doctor/physician.
P362	Take off contaminated clothing and wash before reuse.
P370+P378	In case of fire: Use water spray for extinction.
P403+P235	Store in a well-ventilated place. Keep cool.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse SKIN with water/shower.
P304 + P340	IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for

P305 + P351 + P338	breathing 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
P333 + P313	IF SKIN irritation or rash occurs: Get medical advice/attention.
P405	Store locked up.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed
P501	Dispose of contents/container according to appropriate disposal methods

HMIS Rating

Health: 3
Flammability: 2
Physical Hazard: 0
Reactivity: 0

NFPA Rating

Health: 3
Flammability: 2
Reactivity: 0
Special Hazard: N/A

DISCLAIMER

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. The information in this document is based on the present state of our 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, LLC and its affiliates shall not be held liable for any damage resulting from handling.