

## BOUIN'S FIXATIVE

**Section 1. Identification**

**Product identifier** : BOUIN'S FIXATIVE

**Product code** : Not available.

**Other means of identification** : Not available.

**Product type** : Liquid.

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

**Identified uses** : Histological fixative

**Manufactured/supplied** : CHAPTEC Inc.  
470 avenue Laurendeau  
Montreal-East, QC  
Canada H1B-5M2  
Tel: +1-514-498-3620

**Emergency telephone number (with hours of operation)** : CANUTEC: +1-613-996-6666 or \*666 (cellular) POISON CONTROL CENTER: (800) 463-5060 24/7

**Section 2. Hazard identification**

**Classification of the substance or mixture** : ACUTE TOXICITY (oral) - Category 4  
ACUTE TOXICITY (dermal) - Category 4  
ACUTE TOXICITY (inhalation) - Category 4  
SKIN CORROSION/IRRITATION - Category 1B  
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1  
SKIN SENSITIZATION - Category 1  
CARCINOGENICITY - Category 1  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1

**GHS label elements****Hazard pictograms**

**Signal word** : Danger

**Hazard statements** : H302 - Harmful if swallowed.  
H315 - Causes skin irritation.  
H317 - May cause an allergic skin reaction.  
H318 - Causes serious eye damage.  
H350 - May cause cancer  
H370 - Causes damage to organs

**Precautionary statements****Prevention**

: P201 - Obtain special instructions before use.  
P202 - Do not handle until all safety precautions have been read and understood.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P271 - Use only outdoors or in a well-ventilated area.  
P260 - Do not breathe dust/fume/gas/mist/vapours/spray.  
P270 - Do not eat, drink or smoke when using this product.  
P264 - Wash hands thoroughly after handling.

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## Section 2. Hazard identification

<b>Response</b>	P308 + P311 – IF exposed or concerned: Call a POISON CENTER or doctor/physician. P304 + P340 + P312 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. P301 + P312 + P330 + P331 - IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth. Do NOT induce vomiting. P303 + P352 + P312 + P362+P364 - IF ON SKIN (or hair): Wash with plenty of soap and water. Call a POISON CENTER or physician if you feel unwell. Take off contaminated clothing and wash it before reuse. 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. Immediately call a POISON CENTER or physician. P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention.
<b>Storage</b>	: P405 - Store locked up.
<b>Disposal</b>	: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

## Section 3. Composition/information on ingredients

<b>Substance/mixture</b>	: Mixture
<b>Other means of identification</b>	: Not available.

Ingredient name	% (w/w)	CAS number
Formaldehyde	1 – 10	50-00-0
Acetic acid	1 – 5	64-19-7
Methyl alcohol	1 – 5	67-56-1
Picric acid	0 – 1	88-89-1

The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with the amended HPR as of April 2018.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First-aid measures

### Description of necessary first aid measures

#### **Eye contact:**

Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician.

#### **Inhalation:**

Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

#### **Skin contact:**

Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

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**Section 4. First-aid measures****Ingestion:**

Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Most important symptoms/effects, acute and delayed**  
**Potential acute health effects**

- Eye contact** : Causes serious eye damage.
- Inhalation** : Harmful if inhaled.
- Skin contact** : Harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction.
- Ingestion** : Harmful if swallowed.

**Over-exposure signs/symptoms**

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur
- Ingestion** : Adverse symptoms may include the following: stomach pains

**Indication of immediate medical attention and special treatment needed, if necessary**

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

**Section 5. Fire-fighting measures****Extinguishing media**

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.
- Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur, and the container may burst.

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## Section 5. Fire-fighting measures

<b>Hazardous thermal decomposition products</b>	: Decomposition products may include the following materials: carbon dioxide carbon monoxide Nitrogen oxides.
<b>Special protective actions for fire-fighters</b>	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
<b>Special protective equipment for fire-fighters</b>	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

<b>For non-emergency personnel</b>	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
<b>For emergency responders</b>	: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
<b>Environmental precautions</b>	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

<b>Spill</b>	: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g., sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
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## Section 7. Handling and storage

### Precautions for safe handling

<b>Protective measures</b>	: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
<b>Advice on general occupational hygiene</b>	: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.
<b>Conditions for safe storage, including any incompatibilities</b>	: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

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## Section 8. Exposure controls/personal protection

[Control parameters](#)[Occupational exposure limits](#)

Ingredient name	Exposure limits
Acetic acid	<p><b>CA Alberta Provincial (Canada, 4/2009).</b>  8 hrs OEL: 10 ppm 8 hours.  8 hrs OEL: 25 mg/m<sup>3</sup> 8 hours.  15 min OEL: 37 mg/m<sup>3</sup> 15 minutes.  15 min OEL: 15 ppm 15 minutes.</p> <p><b>CA British Columbia Provincial (Canada, 6/2017).</b>  TWA: 10 ppm 8 hours.</p> <p><b>CA Ontario Provincial (Canada, 1/2018).</b>  TWA: 10 ppm 8 hours.  STEL: 15 ppm 15 minutes.</p> <p><b>CA Quebec Provincial (Canada, 1/2014)</b>  TWAEV: 10 ppm 8 hours.  TWAEV: 25 mg/m<sup>3</sup> 8 hours.  STEV: 15 ppm 15 minutes.  STEV: 37 mg/m<sup>3</sup> 15 minutes.</p> <p><b>CA Saskatchewan Provincial (Canada, 7/2013).</b>  STEL: 15 ppm 15 minutes.  TWA: 10 ppm 8 hours.</p>
Formaldehyde	<p><b>CA Alberta Provincial (Canada, 4/2009).</b>  8 hrs OEL: 0.75 ppm 8 hours.  8 hrs OEL: 0.9 mg/m<sup>3</sup> 8 hours.</p> <p><b>CA British Columbia Provincial (Canada, 7/2016). Skin sensitizer.</b>  TWA: 0.3 ppm 8 hours.</p> <p><b>CA Ontario Provincial (Canada, 7/2015).</b>  STEL: 1 ppm 15 minutes.</p> <p><b>CA Quebec Provincial (Canada, 1/2014).</b>  STEV: 2 ppm 15 minutes.  STEV: 3 mg/m<sup>3</sup> 15 minutes.</p> <p><b>CA Saskatchewan Provincial (Canada, 7/2013). Skin sensitizer.</b>  CEIL: 0.3 ppm</p>
Methyl alcohol	<p><b>CA Alberta Provincial (Canada, 4/2009). Absorbed through skin.</b>  8 hrs OEL: 262 mg/m<sup>3</sup> 8 hours.  8 hrs OEL: 200 ppm 8 hours.  15 min OEL: 250 ppm 15 minutes.  15 min OEL: 328 mg/m<sup>3</sup> 15 minutes.</p> <p><b>CA British Columbia Provincial (Canada, 6/2017). Absorbed through skin.</b>  TWA: 200 ppm 8 hours.  STEL: 250 ppm 15 minutes.</p> <p><b>CA Ontario Provincial (Canada, 1/2018). Absorbed through skin.</b>  TWA: 200 ppm 8 hours.  STEL: 250 ppm 15 minutes.</p> <p><b>CA Quebec Provincial (Canada, 1/2014). Absorbed through skin.</b>  TWAEV: 200 ppm 8 hours.  TWAEV: 262 mg/m<sup>3</sup> 8 hours.  STEV: 250 ppm 15 minutes.  STEV: 328 mg/m<sup>3</sup> 15 minutes.</p> <p><b>CA Saskatchewan Provincial (Canada, 7/2013). Absorbed through skin.</b>  STEL: 250 ppm 15 minutes.  TWA: 200 ppm 8 hours.</p>
Picric acid	<p><b>CA Alberta Provincial (Canada, 4/2020).</b>  TWA: 0.1 mg/m<sup>3</sup> 8 hours</p> <p><b>CA British Columbia Provincial (Canada, 7/2016). Skin sensitizer.</b>  TWA: 0.1 mg/m<sup>3</sup> 8 hours</p> <p><b>CA Ontario Provincial (Canada, 7/2015).</b>  TWA: 0.1 mg/m<sup>3</sup> 8 hours</p> <p><b>CA Quebec Provincial (Canada, 1/2014).</b>  STEV: 0.1 mg/m<sup>3</sup> 8 hours</p> <p><b>CA Saskatchewan Provincial (Canada, 7/2020). Skin sensitizer.</b>  CEIL: 0.1 mg/m<sup>3</sup> 8 hours</p>

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## Section 8. Exposure controls/personal protection

<b>Appropriate engineering controls</b>	: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
<b>Environmental exposure controls</b>	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.
<b><u>Individual protection measures</u></b>	
<b>Hygiene measures</b>	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
<b>Eye/face protection</b>	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
<b><u>Skin protection</u></b>	
<b>Hand protection</b>	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
<b>Body protection</b>	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
<b>Other skin protection</b>	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
<b>Respiratory protection</b>	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

<b>Appearance</b>	
<b>Physical state</b>	: Liquid.
<b>Color</b>	: Yellow.
<b>Odor</b>	: Formaldehyde. [Strong]
<b>Odor threshold</b>	: Not available.
<b>pH</b>	: ≤ 2
<b>Melting point</b>	: Not available.
<b>Boiling point</b>	: Not available.
<b>Flash point</b>	: Not available.
<b>Evaporation rate</b>	: Not available.
<b>Flammability (solid, gas)</b>	: Not available.
<b>Lower and upper explosive (flammable) limits</b>	: Not available.

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## Section 9. Physical and chemical properties

Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 1.0
Solubility	: Soluble in water.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Not available.
Flow time (ISO 2431)	: Not available.

## Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: Reactive with Oxidizing agents.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Formaldehyde	LC50 Inhalation Gas.	Rat	250 ppm	4 hours
	LD50 Dermal	Rabbit	270 mg/kg	-
Methyl alcool	LD50 Oral	Rat	100 mg/kg	-
	LC50 Inhalation Gas.	Rat	145000 ppm	1 hours
	LC50 Inhalation Gas.	Rat	64000 ppm	4 hours
	LD50 Dermal	Rabbit	15800 mg/kg	-
Acetic acid	LD50 Oral	Rat	5600 mg/kg	-
	LD50 Orale	Rat	3310 mg/kg	-
Picric acid	LD50 Orale	Rat	200 mg/kg	-

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## Section 11. Toxicological information

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Formaldehyde	Eyes - Mild irritant	Human	-	6 minutes 1 ppm	-
	Eyes - Severe irritant	Rabbit	-	24 hours 750 µg	-
	Eyes - Severe irritant	Rabbit	-	750 µg	-
	Skin - Mild irritant	Human	-	72 hours 150 µg	-
	Skin - Severe irritant	Human	-	0.01%	-
	Skin - Mild irritant	Rabbit	-	540 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 50 mg	-
Acetic acid	Skin - Severe irritant	Rabbit	-	24 hours 2 mg	-
	Eyes - Mild irritant	Rabbit	-	.5 minutes 5 mg	-
	Skin - Mild irritant	Rabbit	-	24 heures 50 mg	-
	Skin - Severe irritant	Rabbit	-	525 mg	-
	Eyes - Severe irritant	Rabbit	-	1 mg	-

Sensitization

There is no data available.

Mutagenicity

There is no data available.

CarcinogenicityClassification

Product/ingredient name	OSHA	IARC	NTP
Formaldehyde	+	1	Known to be a human carcinogen.

Reproductive toxicity

There is no data available.

Teratogenicity

There is no data available.

Specific target organ toxicity (single exposure)

Name	Category	Target organs
Formaldehyde	Category 3	Respiratory tract irritation
Methyl alcohol	Category 1	Not determined

Specific target organ toxicity (repeated exposure)

There is no data available.

Aspiration hazard.

There is no data available.

**Information on the likely routes of exposure** : Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

**Eye contact** : Causes serious eye damage.

**Inhalation** : Harmful if inhaled.

**Skin contact** : Harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction.

**Ingestion** : Harmful if swallowed.



## BOUIN'S FIXATIVE

## Section 11. Toxicological information

### Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur
- Ingestion** : Adverse symptoms may include the following: stomach pains

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

- Potential immediate effects** : No known significant effects or critical hazards.
- Potential delayed effects** : No known significant effects or critical hazards.

#### Long term exposure

- Potential immediate effects** : No known significant effects or critical hazards.
- Potential delayed effects** : No known significant effects or critical hazards.

#### Potential chronic health effects

- General** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Carcinogenicity** : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.

#### Numerical measures of toxicity

##### Acute toxicity estimates

Route	ATE value
Inhalation (gases)	N/D
Inhalation (vapors)	N/D

## BOUIN'S FIXATIVE

## Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Formaldehyde	Acute EC50 3.48 mg/L Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Acute EC50 0.788 mg/L Marine water	Algae - Ulva pertusa	96 hours
	Acute EC50 12.98 mg/L Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute EC50 5800 µg/L Fresh water	Daphnia - Daphnia pulex - Neonate	48 hours
	Acute LC50 1.41 ppm Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Chronic NOEC 0.005 mg/L Marine water	Algae - Isochrysis galbana – Exponential growth phase	96 hours
Methyl alcohol	Chronic NOEC 953.9 ppm Fresh water	Fish - Oncorhynchus tshawytscha - Egg	43 days
	Acute LC50 2500000 µg/L Marine water	Crustaceans - Crangon crangon - Adult	48 hours
Acetic acid	Acute LC50 3289 mg/L Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 290 mg/L Fresh water	Fish - Danio rerio - Egg	96 hours
Picric acid	Acute LC50 32 mg/L Marine water	Crustaceans - Artemia salina	48 hours
	Acute LC50 178 mg/L Marine water	Fish - Gasterosteus aculeatus	96 hours
Picric acid	Acute CE50 32400 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute CE50 41700 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute CE50 55 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute CL50 56 ppm Marine water	Crustaceans - Americamysis bahia	48 hours
	Acute CL50 109600 µg/l Fresh water	Fish - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Chronic NOEC 169 mg/l Marine water	Algae - Ulva fasciata	96 hours
	Chronic NOEC 5000 µg/l Fresh water	Daphnia - Daphnia magna	21 days

Persistence and degradability

There is no data available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Methyl alcohol	- 77	<10	Low
Acetic acid	-0.17	3.16	Low
Picric acid	1.44	2.19	Low

Mobility in soil

**Soil/water partition coefficient (KOC)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.




## Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## BOUIN'S FIXATIVE

## Section 14. Transport information

	TDG Classification	IMDG	IATA
UN number	UN3265	UN3265	UN3265
UN proper shipping name	CORROSIVE LIQUID, ACID, ORGANIC, N.O.S ACIDE (formaldehyde, acetic acid)	CORROSIVE LIQUID, ACID, ORGANIC, N.O.S ACIDE (formaldehyde, acetic acid)	CORROSIVE LIQUID, ACID, ORGANIC, N.O.S ACIDE (formaldehyde, acetic acid)
Transport hazard class(es)	8 	8 	8 
Packing group	III	III	III
Environmental hazards	Non.	Non.	Non.

Additional information

<b>TDG Classification</b>	: Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.40 - 2.42 (Class 8).
<b>IMDG</b>	: <b>Emergency schedules</b> F-E, S-D
<b>Emergency Response</b>	: 154
<b>Special precautions for user</b>	: <b>Transport within user's premises:</b> always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

## Section 15. Regulatory information

Canadian lists

<b>Canada inventory (DSL NDSL)</b>	: All components are listed or exempted.
<b>Canadian NPRI</b>	: The following components are listed: Formaldehyde; Methanol
<b>CEPA Toxic substances</b>	: The following components are listed: Formaldehyde.

## BOUIN'S FIXATIVE

## Section 16. Other information

### Procedure used to derive the classification

Classification	Justification
ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION/IRRITATION - Category 1B SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1	On basis of test data On basis of test data Calculation method Expert judgment Calculation method Calculation method Calculation method Calculation method

### History

**Date of issue** : 10-10-2021

**Date of previous issue** : Not applicable.

**Version** : 3

**Prepared by** : ChapTec

**Key to abbreviations** : ATE = Acute Toxicity Estimate  
 BCF = Bioconcentration Factor  
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods  
 LogPow = logarithm of the octanol/water partition coefficient  
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
 UN = United Nations  
 HPR = Hazardous Products Regulations

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.