Mopec 800 Tech Row Madison Heights, MI 48071 Customer Service: Phone (800) 362-8491 Email: customerservice@mopec.com

## **Section I - Product Identification**

A buffered aqueous solution of formaldehyde.

## Section II - Hazards Identification

Danger: Formaldehyde is a proven carcinogen. Harmful if swallowed. Irritating to skin eyes and respiratory tract.

Safety Ratings					
Health: Hazardous	Flammability: None	Reactivity: None	Contact: Slight		
Recommended safet	ty equipment: safety go	ggles, lab coat and j	oroper gloves	~	
Storage: General stor	rage				$\wedge 0 $
NFPA Ratings				$\langle \rangle$	
Health = 2 Flamm	ability = 0 Reactivity	/ = 0		$\checkmark$	$\vee$ $\vee$

#### **Potential Health Effects**

Inhalation of formaldehyde can lead to congestion, coughing and shortness of breath. Frequent skin contact leads to drying and scaling. Ingestion will damage the throat, stomach and intestines resulting in nausea, vomiting, abdominal pain and diarrhea. Lowered blood pressure, spontaneous abortion, loss of consciousness and kidney damage may result. Inhalation of high concentrations of vapor (14 ppm) have caused cancer in laboratory animals. Genetic damage in bacteria has been demonstrated.

Inhalation: Irritating to respiratory tract. May cause asthma like symptoms in sensitive individuals.

*Ingestion:* Can cause irritation and chemical burns to the mouth, throat, esophagus and stomach. Can also cause nausea, vomiting, diarrhea, etc.

Skin contact: May cause skin irritation or aggravation of existing dermatitis. May cause temporary discoloration of the skin.

*Eye contact:* Vapors may cause stinging sensation and tearing. Solution contact can cause corneal injury which can cause visual impairment if not dealt with immediately.

Aggravation of preexisting conditions: May aggravate preexisting asthma and other lung diseases.

## Section III - Composition/Information on Components

Ingredients	CAS#	OSHA Pel	ACGIH TLV	Other Limits	%
Formaldehyde	50-00-0	0.75 ppm (TWA)	0.3 ppm (CEIL)		4% w/v
Methanol	67-56-1	200 ppm (TWA)	250 ppm (STEL)		1% v/v

## **Section IV - First Aid Measures**

Inhalation: Remove from source of exposure and get medical attention for any breathing difficulty.

Ingestion: Drink large quantities of fluids and call a physician immediately. Administer activated charcoal or other adsorbent if available.

Skin Contact: Wash affected area with soap and water. Get medical advice if irritation develops.

Eye Contact: Immediately flush thoroughly with running water for at least 15 minutes. Get immediate medical advice.

## **Section V - Fire Fighting Measures**

Flash point: Not applicable.
Flammable Limits: Not applicable.
Fire: Not normally a fire Hazard,
Explosion: Not Normally an explosion hazards.
Fire Extinguishing Media: Any means suitable for surrounding fire.
Special information: Pyrolysis will release corrosive oxides.

Section VI - Accidental Release Measures

# Wear appropriate protective gear such as gloves, apron and protective eye wear. Absorb with a suitable absorbent (such as paper towels) and store in a suitable container for disposal. Large spills may be neutralized with formalin neutralizers.

#### Section VII - Handling and Storage

Store in a closed container at controlled room temperature, 59 °F to 86 °F (15 °C to 30 °C).

#### Section VIII - Exposure Control/Personal Protection

Airborne Exposure Limits: See section III.

Ventilation System: Use appropriate ventilation. Laboratory fume hoods or similar apparatus are recommended for handling formaldehyde solutions. When required, Refer to the ACGIH document, "Industrial Ventilation, a Manual of Recommended Practices" for details about ventilation.

*Personal Respirator:* Required if threshold limit value for formaldehyde is exceeded. In case of emergency, or when exposure levels are unknown, use a half face or full face respirator with organic vapor cartridges.

Skin protection: Chemical resistant gloves are recommended.

Eye Protection: Laboratory safety goggles, safety glasses or face shield are required.

People who regularly work with formaldehyde are required to have regular medical surveillance.

## Section IX - Physical and Chemical Properties

Boiling Point: 98-99 °CDensity: About 1.01 g/mlVapor pressure (mm Hg): 18 @ 20 °CEvaporation Rate (water = 1): 1Vapor Density (air = 1): 0.6Solubility: Infinitely miscible with waterAppearance and Odor: A clear liquid with the pungent odor of formaldehyde.Solubility: Infinitely miscible with water

## Section X - Stability and Reactivity

Stability: Freezes at low temperature.

Hazardous Decomposition Products: Nothing unusual.

Hazardous polymerization: Will not occur.

Incompatibilities: Nothing unusual.

Conditions to avoid: Excessive cold/heat and light.

## **Section XI - Toxicological Information**

*Toxicity:* Toxic by ingestion or inhalation. The chronic toxicity of this product is unknown but may include sensitization in sensitive individuals. Formaldehyde is a known human carcinogen

Cancer lists				
<u>Ingredient</u>	Known Carcinogenicity?	<u>NTP?</u>	Anticipated?	IARC Category
Formaldehyde	yes	no	yes	2A
Methanol	no	no	no	none

#### **Section XII - Ecological Information**

Environmental Fate: Biodegradable

Environmental Toxicity: Formaldehyde is expected to be toxic to fish.

## **Section XIII - Disposal Considerations**

Incineration at a licensed chemical disposal facility is the preferred disposal method for formaldehyde. Because formaldehyde is a known human carcinogen, local and state governments often restrict the amount that may be flushed down the drain without neutralization. Neutralization may be achieved with glycine, bisulfite or ammonia. There are also proprietary products that are authorized for formaldehyde. Dispose of contents and container in accord with all applicable regulations.

#### **Section XIV - Transportation information**

Formalin solutions with less than 10% formaldehyde are not regulated by DOT.

Chemical Inventory Status         Ingredient       TSCA       EC         Formaldehyde       Yes       Yes         Methanol       Yes       Yes         Federal, State and International Regulations         Ingredient       RQ       TPQ       List       Category       261.33       8(D)       Ca. Prop 65         Formaldehyde       100       500       Yes       No       U122       No       Yes         Methanol       No       No       Yes       No       Yes       Yes         Formaldehyde       100       500       Yes       No       U122       No       Yes         Ingredient       RQ       TPQ       List       Category       261.33       8(D)       Ca. Prop 65         Formaldehyde       100       500       Yes       No       U122       No       Yes         Methanol       No       No       Yes       No       Yes       Yes       Yes         Ingredient       Chemical Weapons Convention       TSCA 12(b)       CDTA       Yes       Yes         Formaldehyde       No       No       No       No       No       SARA 311/312         Ingredient </th <th colspan="7">Section XV - Regulatory Information</th>	Section XV - Regulatory Information									
Formaldehyde       Yes       Yes       Yes         Methanol       Yes       Yes       Yes         Federal, State and International Regulations       Federal, State and International Regulations         Ingredient       RQ       TPQ       List       Category       261.33       8(D)       Ca. Prop 65         Formaldehyde       100       500       Yes       No       U122       No       Yes         Methanol       No       No       Yes       No       U154       No       Yes         Ingredient       Chemical Weapons Convention       TSCA 12(b)       CDTA       Formaldehyde       No       No         Formaldehyde       No       No       No       No       No       SARA 311/312	<b>Chemical Invento</b>	ory Status	5							
MethanolYesYesFederal, State and International RegulationsSARA 302SARA 313RCRATSCAIngredientRQTPQListCategory261.338(D)Ca. Prop 65Formaldehyde100500YesNoU122NoYesMethanolNoNoYesNoU154NoYesIngredientChemical Weapons ConventionTSCA 12(b)CDTACDTAFormaldehydeNoNoNoNoNoMethanolNoNoNoNoNoSARA 311/312KoKoKoKo	<b>Ingredient</b>	<u>TSCA</u>		<u>EC</u>						
Federal, State and International Regulations         SARA 302       SARA 313       RCRA       TSCA         Ingredient       RQ       TPQ       List       Category       261.33       8(D)       Ca. Prop 65         Formaldehyde       100       500       Yes       No       U122       No       Yes         Methanol       No       No       Yes       No       U154       No       Yes         Ingredient       Chemical Weapons Convention       TSCA 12(b)       CDTA       Formaldehyde       No       No         Formaldehyde       No       No       No       No       No       SARA 313       Same 2000         SARA 311/312       No       No       No       Same 2000       Same 2000       Same 2000       Same 2000       Same 2000	Formaldehyde	Yes		Yes						
SARA 302SARA 313RCRATSCAIngredientRQTPQListCategory261.338(D)Ca. Prop 65Formaldehyde100500YesNoU122NoYesMethanolNoNoYesNoU154NoYesIngredientChemical Weapons ConventionTSCA 12(b)CDTAFormaldehydeNoNoNoNoMethanolNoNoNoNoSARA 311/312NoNoNo	Methanol	Yes		Yes						
IngredientRQTPQListCategory261.338(D)Ca. Prop 65Formaldehyde100500YesNoU122NoYesMethanolNoNoYesNoU154NoYesIngredientChemical Weapons ConventionTSCA 12(b)CDTAFormaldehydeNoNoFormaldehydeNoNoNoNoNoNoSARA 311/312	Federal, State an	d Interna	tional R	egulatio	ns					
Formaldehyde100500YesNoU122NoYesMethanolNoNoYesNoU154NoYesIngredientChemical Weapons ConventionTSCA 12(b)CDTAFormaldehydeNoNoNoNoMethanolNoNoNoNoSARA 311/312ValueValueValue		SARA	302		SARA 3	<u>313</u>	<u>RCRA</u>	<u>TSCA</u>		
MethanolNoNoYesNoU154NoYesIngredientChemical Weapons ConventionTSCA 12(b)CDTAFormaldehydeNoNoNoMethanolNoNoNoSARA 311/312Santa 11/312Santa 11/312	Ingredient	<u>RQ</u>	<u>TPQ</u>		<u>List</u>	Category	<u>261.33</u>	<u>8(D)</u>	<u>Ca. Prop 65</u>	
IngredientChemical Weapons ConventionTSCA 12(b)CDTAFormaldehydeNoNoNoMethanolNoNoNoSARA 311/312SARA 311/312NoNo	Formaldehyde	100	500		Yes	No	U122	No	Yes	
FormaldehydeNoNoMethanolNoNoSARA 311/312No	Methanol	No	No		Yes	No	U154	No	Yes	
Methanol No No No SARA 311/312	Ingredient	<u>Chem</u>	Chemical Weapons Convention			<u>TSCA 12(b)</u>	<u>CDTA</u>			
SARA 311/312	Formaldehyde	No				No	No			
	Methanol	No				No	No			
Ingredient Acute? Chronic?	SARA 311/312									
	<b>Ingredient</b>	<u>Acute</u>	?	<u>Chronic</u>	?					
Formaldehyde Yes Yes	Formaldehyde	Yes		Yes						

## **Section XVI - Other Information**

This information is believed to be correct but is not waranteed as such, nor does it purport to be all inclusive. Revision Date: Jul. 26, 2019