

Issue Date: 5/15/15  
 Last Revised Date: 5/15/15

# SAFETY DATA SHEET

GHS FORMAT

## MAC 334 Concentrated CH Solution

### 1. IDENTIFICATION

<b>PRODUCT NAME</b>	MAC 334 Concentrated CH Solution
<b>SYNONYMS</b>	Preservative solution
<b>RECOMMENDED USE/RESTRICTIONS</b>	For industrial use only
<b>MANUFACTURER</b>	Ratermann Manufacturing, Inc. 601 Pinnacle Place Livermore, CA 94550  Telephone Number: 800-264-7793
<b>EMERGENCY PHONE NUMBER</b>	ChemTel Inc. 1(800) 255-3924 Contract: MIS4545

### 2. HAZARDS IDENTIFICATION

<b>HAZARD DESIGNATION</b>	None
---------------------------	------

#### GHS CLASSIFICATION:

HEALTH	ENVIRONMENTAL	PHYSICAL
Acute toxicity – Oral, Category 5		

#### GHS LABEL:

<b>WARNING</b>	
H303: May be harmful if swallowed	
<b>PRECAUTIONARY STATEMENT(S)</b>	
<b>PREVENTION:</b>	
P280: Wear protective gloves/eye protection/face protection	
<b>RESPONSE:</b>	
P312: Call a POISON CENTER/doctor/physician if you feel unwell.	
<b>STOARGE:</b>	
P403 + P235: Store in a well-ventilated place. Keep cool.	
<b>DISPOSAL:</b>	
P501: Dispose of contents/container in accordance with local/regional/national/international regulations.	

**SAFETY DATA SHEET**

GHS FORMAT

**MAC 334 Concentrated CH Solution****3. COMPOSITION/INFORMATION ON INGREDIENTS**

CHEMICAL NAME	WEIGHT %	CAS
Dihydrogen monoxide	85-95%	7732-18-5
Polyoxyethylene	2-9%	25322-68-3

**4. FIRST AID MEASURES**

<b>EYES</b>	Flush eyes with water for 15 minutes. Get medical attention.
<b>SKIN</b>	Wash with soap and water. Get medical attention if irritation develops or persists.
<b>INGESTION</b>	Immediately drink two glasses of water or milk. Do not induce vomiting. Get medical attention.
<b>INHAILATION</b>	Remove victim to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

**5. FIRE FIGHTING MEASURES**

<b>SUITABLE EXTINGUISHING MEDIA:</b>	SMALL FIRES: Any extinguisher suitable for Class B fires, dry chemical, CO <sub>2</sub> , water spray or fire fighting foam. LARGE FIRES: Water spray, fog or fire fighting foam. Water may be ineffective for fighting the fire, but may be used to cool fire exposed containers. Keep containers and surroundings cool with water spray.
<b>FIRE FIGHTING PROCEDURES:</b>	Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water. For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied fire fighting foam. Exposure to decomposition products may be a hazard to health. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Fire residues and contaminated fire

**SAFETY DATA SHEET**

GHS FORMAT

**MAC 334 Concentrated CH Solution**

	extinguishing water must be disposed of in accordance with local regulations.
<b>UNUSUAL FIRE AND EXPLOSION HAZARDS:</b>	None
<b>COMBUSTION PRODUCTS:</b>	None

**6. ACCIDENTAL RELEASE MEASURES**

<b>SMALL SPILL:</b>	Absorb liquid and place in sealed container for disposal.
<b>LARGE SPILL:</b>	Absorb liquid and place in sealed container for disposal. Avoid runoff into storm sewers and ditches which lead to waterways. Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust.
<b>ENVIRONMENTAL PRECAUTIONS</b>	
<b>WATER SPILL:</b>	Keep material out of storm sewers and ditches that lead to waterways.
<b>LAND SPILL:</b>	Spills and releases may have to be reported to federal and/or local authorities.
<b>AIR SPILL:</b>	Control or stop the loss of materials to the atmosphere.
<b>SPECIAL PROTECTIVE EQUIPMENT:</b>	Wear suitable protective clothing, gloves and eye/face protection.

**7. HANDLING AND STORAGE**

<b>HANDLING:</b>	Do not get in eyes, on skin or on clothing. Keep container closed. Use only with adequate ventilation. Use good personal hygiene practices. Wash hands before eating, drinking, smoking. Remove contaminated clothing and clean before re-use. Destroy contaminated belts and shoes and other items that cannot be decontaminated. Keep operating temperatures below ignition temperatures at all times.
<b>STORAGE:</b>	Store in tightly closed containers in cool, dry, well-ventilated area away from incompatibles. Store at ambient or lower temperature. Store out of direct sunlight. Keep containers tightly closed and upright when not in use. Protect against physical damage. Do not cut, grind, drill, or weld on or near containers unless precautions are taken against these hazards.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**SAFETY DATA SHEET**

GHS FORMAT

**MAC 334 Concentrated CH Solution**

<b>EXPOSURE LIMITS</b>			
<b>Component</b>	<b>OHSA</b>		<b>ACGIH</b>
	<b>PEL</b>	<b>STEL</b>	<b>TLV</b>
Dihydrogen monoxide	N/A		N/A
Polyoxyethylene	10mg/m <sup>3</sup>		10mg/m <sup>3</sup>

<b>ENGINEERING CONTROLS</b>	Use only in a well ventilated area.
<b>PERSONAL PROTECTIVE EQUIPMENT</b>	
<b>EYES AND FACE:</b>	Use chemical splash goggles and face shield (ANSI Z87.1 or approved equivalent).
<b>SKIN:</b>	Wear chemical resistant neoprene, butyl rubber or vinyl gloves.
<b>RESPIRATORY:</b>	NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.
<b>PROTECTIVE CLOTHING:</b>	Wear protective gloves and clean body-covering clothing. Chemically resistant clothing and boots may be required.
<b>WORK HYGIENIC PRACTICES</b>	Establish good personal hygiene and work practices. Always wash hands and face before eating, drinking or smoking. Provide safety shower and eye wash station in work area.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>PHYSICAL STATE:</b>	Liquid
<b>ODOR:</b>	Slight phenolic odor
<b>APPEARANCE:</b>	Clear, colorless liquid
<b>pH:</b>	Neutral
<b>PERCENT VOLITILE:</b>	100%
<b>VAPOR PRESSURE:</b>	N/A
<b>VAPOR DENSITY:</b>	N/A
<b>BOILING POINT:</b>	212°F
<b>FREEZING POINT:</b>	32°F
<b>FLASHPOINT AND METHOD:</b>	N/A
<b>SOULUBILITY IN WATER:</b>	Complete
<b>EVAPORATION RATE:</b>	0.002
<b>SPECIFIC GRAVITY:</b>	1.02

**SAFETY DATA SHEET**

GHS FORMAT

**MAC 334 Concentrated CH Solution**

<b>VISCOSITY:</b>	<1 Centipoise
-------------------	---------------

**NOTE:** The information in this section is calculated from specific known information about this product. This information should not be used as exact test results or specifications. The information is provided as typical properties for this product.

**10. STABILITY AND REACTIVITY**

<b>STABLE:</b>	Yes
<b>HAZARDOUS POLYMERIZATION:</b>	No
<b>STABILITY:</b>	Stable under ordinary conditions of use and storage.
<b>CONDITIONS TO AVOID:</b>	None
<b>HAZARDOUS DECOMPOSITION PRODUCTS:</b>	Carbon dioxide and/or carbon monoxide
<b>INCOMPATIBLE MATERIALS:</b>	Strong oxidizing agents

**11. TOXICOLOGICAL INFORMATION****ACUTE**

<b>DERMAL LD<sub>50</sub>:</b>	Not indicated
<b>ORAL LD<sub>50</sub>:</b>	Not indicated
<b>INHALATION LC<sub>50</sub>:</b>	Not indicated

**EYE EFFECTS:** Mildly irritating to eyes.

**SKIN EFFECTS:** May be absorbed through the skin in harmful amounts.

**CARCINOGENINITY**

<b>IARC:</b>	Not listed
<b>NTP:</b>	Not listed
<b>OHTA:</b>	Not listed

<b>REPRODUCTIVE EFFECTS:</b>	Not indicated
<b>TERATOGENIC EFFECTS:</b>	No data available
<b>MUTAGENICITY:</b>	Not indicated

**16. OTHER INFORMATION**

Issue Date: 5/15/15  
Last Revised Date: 5/15/15

# SAFETY DATA SHEET

GHS FORMAT

## MAC 334 Concentrated CH Solution

---

### HMIS RATINGS:

<b>HEALTH</b>	<b>1</b>
<b>FLAMMABILITY</b>	<b>0</b>
<b>REACTIVITY</b>	<b>0</b>
PERSONAL PROTECTION	<input type="checkbox"/>

**LAST REVISED:** 5/15/15

**Disclaimer:** The information contained herein is accurate to the best of our knowledge. Ratermann Manufacturing, Inc. makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances.