



# Safety Data Sheet

## Section 01 - Identification

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<b>Product Identifier</b>	No. 87 Cooling Water Compound
<b>Other Means of Identification</b>	None
<b>Product Use and Restrictions on Use</b>	Cooling water treatment. A concentrated corrosion and scale preventative compound for cooling towers and condenser feed water.
<b>Initial Supplier Identifier</b>	ClearTech Industries Inc. 1500 Quebec Avenue Saskatoon, SK. Canada S7K 1V7
<b>Prepared By</b>	ClearTech Industries Inc. Technical Writer Phone: 1 (800) 387-7503
<b>24-Hour Emergency Phone</b>	Phone: 1 (306) 664 – 2522

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## Section 02 - Hazard Identification

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### GHS-Classification

<b>Skin Corrosion/Irritation</b>	Category 1B
<b>Serious Eye Damage/Irritation</b>	Category 1

### Physical Hazards

<b>Corrosive to Metals</b>	Category 1
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### **Danger**

### **Hazards Statements**

H314 – Causes severe skin burns and eye damage.  
H290 – May be corrosive to metals.

### **Pictograms**



### **Precautionary Statements**

P234 – Keep only in original container.  
P405 – Store locked up.  
P260 – Do not breathe mist, vapours or spray.  
P304 + P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P310 – Immediately call a POISON CENTER or doctor/physician.  
P280 – Wear protective gloves, protective clothing, eye protection, and face protection.  
P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 – If eye irritation persists: Get medical advice/attention.  
P301 +P330 + P331 – IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303 + P361 + P353 – IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin.  
P363 – Wash contaminated clothing before reuse.  
P390 – Absorb spillage to prevent material damage.  
P501 – Dispose of contents/container in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.

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## Section 03 - Composition / Information on Ingredients

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Chemical Name	CAS Number	Weight %	Unique Identifiers
Methylene phosphonic acid	6419-19-8	5-10%	
Phosphoric acid	7664-38-2	3-7%	

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## Section 04 - First Aid Measures

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<b>Inhalation</b>	If symptoms are experienced, remove victim to fresh air. Give artificial respiration only if breathing has stopped. If breathing is difficult, give oxygen. Seek medical attention.
<b>Skin Contact / Absorption</b>	Remove contaminated clothing. Rinse skin with lukewarm, gently flowing water for 30 minutes. Seek immediate medical attention. Completely decontaminate clothing, shoes and leather goods before reuse or discard.
<b>Eye Contact</b>	Contact lenses should never be worn when working with this product. Flush immediately with water for at least 30 minutes. Forcibly hold eyelids apart to ensure complete irrigation of eye tissue. If a contact lens is present, remove only if easy to do so. Seek immediate medical attention.
<b>Ingestion</b>	Do not induce vomiting unless advised by a physician. If vomiting occurs, lean victim forward to prevent breathing in vomitus. Give plenty of water to dilute. Do not give anything by mouth to an unconscious or convulsing person. Seek immediate medical attention.
<b>Additional Information</b>	Not Available

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## Section 05 - Fire Fighting Measures

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<b>Suitable Extinguishing Media</b>	Carbon dioxide, dry chemical powder, alcohol foam, polymer foam, water spray or fog.
<b>Unsuitable Extinguishing Media</b>	Not Available
<b>Specific Hazards Arising From the Chemical</b>	May liberate carbon monoxide, carbon dioxide, and oxides of sodium. Phosphoric acid can react with most metals to product highly flammable hydrogen gas, which may explode if ignited. During a fire, irritating/toxic phosphorus oxides may be generated. Closed containers may rupture violently in the heat of a fire.
<b>Special Protective Equipment and Precautions for Fire-Fighters</b>	Wear NIOSH-approved self-contained breathing apparatus and protective clothing.
<b>Further Information</b>	Not Available

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## Section 06 - Accidental Release Measures

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<b>Personal Precautions / Protective Equipment / Emergency Procedures</b>	Wear appropriate personal protective equipment. Ventilate area. Only enter area with PPE. Stop or reduce leak if safe to do so. Flush with water to remove any residue.
<b>Environmental Precautions</b>	Prevent material from entering sewers, waterways or low areas.

**Methods and Materials for Containment and Cleaning Up**

Isolate hazard area and restrict access.  
SMALL SPILLS: Soak up with inert absorbent material and scoop into containers.  
LARGE SPILLS: Prevent contamination of waterways. Dike and pump into suitable containers. Clean up residual with absorbent material, place in appropriate container and flush with water.

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**Section 07 - Handling and Storage**

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**Precautions for Safe Handling**

This material is CORROSIVE to the eyes and skin. Use proper equipment for lifting and transporting all containers. Use sensible industrial hygiene and housekeeping practices. Do not ingest. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Avoid all situations that could lead to harmful exposure.

**Conditions for Safe Storage**

Keep out of reach of children. Keep container tightly closed. Store in a cool, dry area.

**Incompatibilities**

Oxidizers and bases. Reacts with metals.

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**Section 08 - Exposure Controls and Personal Protection**

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**Exposure Limit(s)**

Component	Regulation	Type of Listing	Value
Phosphoric Acid	ACGIH	TLV-TWA	1mg/m <sup>3</sup>
	ACGIH	STEL	3mg/m <sup>3</sup>
	OSHA	TWA	1mg/m <sup>3</sup>
	OSHA	STEL	3mg/m <sup>3</sup>
Methylene Phosphonic Acid	WEELs	TWA	10mg/m <sup>3</sup>

**Engineering Control(s)**

**Ventilation Requirements**

Mechanical ventilation (dilution or local exhaust), process or personnel enclosure and control of process conditions must be provided in accordance with all fire codes and regulatory requirements. Supply sufficient replacement air to make up for air removed by exhaust systems.

**Other**

Emergency shower and eyewash must be available and tested in accordance with regulations and be in close proximity.

**Protective Equipment**

**Eyes/Face**

Chemical goggles, full-face shield, or a full-face respirator is to be worn at all times when product is handled. Contact lenses should not be worn; they may contribute to severe eye injury.

**Hand Protection**

Impervious gloves of chemically resistant material (rubber or PVC) should be worn at all times. Wash contaminated clothing and dry thoroughly before reuse.

**Skin and Body Protection**

Body suite, aprons, and/or coveralls of chemical resistant material should be worn at all times. Wash contaminated clothing and dry thoroughly before reuse.

Impervious boots of chemically resistant material should be worn at all times. No special footwear is required other than what is mandated at place of work.

**Respiratory Protection**

If exposure exceeds occupational exposure limits, use an appropriate NIOSH approved respirator.

**Thermal Hazards**

Not Available

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## Section 09 - Physical and Chemical Properties

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### Appearance

Physical State	Liquid
Colour	Clear, colourless
Odour	Not Available
Odour Threshold	Not Available

### Property

pH	1.5-2.0
Melting Point/Freezing Point	Not Available
Initial Boiling Point and Boiling Range	Not Available
Flash Point	Not Applicable
Evaporation Rate	Not Available
Flammability	Non-Flammable
Upper Flammable Limit	Not Applicable
Lower Flammable Limit	Not Applicable
Vapour Pressure (mm Hg, 20°C)	Not Available
Vapour Density (Air=1)	Not Available
Relative Density	Not Available
Solubility(ies)	100% in water
Partition Coefficient: n-octanol/water	Not Available
Auto-ignition Temperature	Not Applicable
Decomposition Temperature	Not Available
Viscosity	Not Available
Explosive Properties	Not Applicable
Specific Gravity (Water=1)	1.06
% Volatiles by Volume	Not Available
Formula	Not Available
Molecular Weight	Not Available

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## Section 10 - Stability and Reactivity

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<b>Reactivity</b>	Reacts with metals.
<b>Stability</b>	Stable
<b>Possibility of Hazardous Reactions</b>	Not Available
<b>Conditions to Avoid</b>	Not Available
<b>Incompatible Materials</b>	Oxidizers and bases. Reacts with metals.
<b>Hazardous Decomposition Products</b>	Not Available

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## Section 11 - Toxicological Information

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### Acute Toxicity Estimate

<b>Component</b>	<b>Oral LD<sub>50</sub></b>	<b>Dermal LD<sub>50</sub></b>	<b>Inhalation LC<sub>50</sub></b>
No. 87 Cooling Water Compound	10,710 mg/kg	24,570 mg/kg	2.7 mg/L

This product has been classified in accordance with the Hazardous Products Regulations using ATE formula documented in the GHS standard.

### Chronic Toxicity – Carcinogenicity

<b>Component</b>	<b>IARC</b>
No. 87 Cooling Water Compound	None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

<b>Skin Corrosion/Irritation</b>	Corrosive. Capable of producing severe burns, blisters, ulcers and permanent scarring.
<b>Ingestion</b>	Corrosive. May cause sore throat, abdominal pain, nausea, and severe burns of the mouth, throat, and stomach. Severe exposures can lead to shock, circulatory collapse, and death.
<b>Inhalation</b>	Inhalation is not an expected hazard unless misted or heated to high temperatures. Mist or vapor inhalation can cause irritation to the nose, throat, and upper respiratory tract. Severe exposures can lead to a chemical pneumonitis.
<b>Serious Eye Damage/Irritation</b>	Corrosive. Capable of producing serious eye burns and permanent damage, including blindness.
<b>Respiratory or Skin Sensitization</b>	Not Available
<b>Germ Cell Mutagenicity</b>	No known significant effects.
<b>Reproductive Toxicity</b>	No known significant effects.
<b>STOT-Single Exposure</b>	Not Available
<b>STOT-Repeated Exposure</b>	Repeat or prolonged exposure may cause damage to lungs.
<b>Aspiration Hazard</b>	Corrosive to respiratory system. Harmful if swallowed. Causes burns to mouth, throat, and stomach. Severe exposures can lead to a chemical pneumonitis.
<b>Synergistic Materials</b>	Not Available

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## Section 12 – Ecological Information

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### Ecotoxicity

Component	Toxicity to Algae	Toxicity to Fish	Toxicity to Daphnia and Other Aquatic Invertebrates
Methylene phosphonic acid	Not Available	LC <sub>50</sub> (Carp, 48hr): 260mg/L	EC <sub>50</sub> (palaemonetes vulgaris, 96hr): 4574mg/L
<b>Biodegradability</b>	Phosphoric acid is expected to be readily biodegradable. Methylene phosphonic acid is not expected to be readily biodegradable.		
<b>Bioaccumulation</b>	No bioaccumulation expected.		
<b>Mobility</b>	Not Available		
<b>Other Adverse Effects</b>	Not Available		

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## Section 13 – Disposal Considerations

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<b>Waste From Residues/Unused Products</b>	Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.
<b>Contaminated Packaging</b>	Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.

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## Section 14 – Transport Information

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<b>UN Number</b>	UN3264	
<b>UN Proper Shipping Name</b>	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric acid)	
<b>Transport Hazard Class(es)</b>	8	
<b>Packaging Group</b>	II	
<b>Environmental Hazards</b>	Not listed as a marine pollutant under Canadian TDG Regulations, schedule III.	
<b>Special Precautions</b>	Not Available	
<b>Transport in Bulk</b>	Not Available	
<b>Additional Information</b>	<u>Packing Group</u>	<u>Limited Quantity Index</u>
	I	0
	II	1 L
	III	5 L

### TDG

<b>Other</b>	Secure containers (full and/or empty) with suitable hold down devices during shipment and ensure all caps, valves, or closures are secured in the closed position.
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**TDG PRODUCT CLASSIFICATION:** This product has been classified on the preparation date specified at section 14 of this MSDS / SDS, for transportation in accordance with the requirements of part 2 of the Transportation of Dangerous Goods Regulations. If applicable, testing and/or published test data regarding the classification of this product are listed in the references at section 16 of this MSDS / SDS.

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## Section 15 – Regulatory Information

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**NOTE: THE PRODUCT LISTED ON THIS SDS HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CANADIAN CONTROLLED PRODUCTS REGULATIONS. THIS SDS CONTAINS ALL INFORMATION REQUIRED BY THOSE REGULATIONS.**

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## Section 16 – Other Information

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**Preparation Date**

August 27, 2015

**Note:** The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations.

**Attention: Receiver of the chemical goods / SDS coordinator**

As part of our commitment to the Canadian Association of Chemical Distributors (CACD) Responsible Distribution® initiative, ClearTech Industries Inc. and its associated companies require, as a condition of sale, that you forward the attached Safety Data Sheet(s) to all affected employees, customers, and end-users. ClearTech will send any available supplementary handling, health, and safety information to you at your request.

If you have any questions or concerns please call our customer service center.

**References:**

- 1) CHEMINFO
- 2) eChemPortal
- 3) TOXNET
- 4) Transportation of Dangerous Goods Canada
- 5) HSDB
- 6) ECHA

**ClearTech Industries Inc. - Locations**

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