

## 1. IDENTIFICATION

*Trade Name:* 7612 Cooling Water Treatment

*Chemical Name & Synonyms:* Proprietary Cooling Water Treatment Blend

*UN/ID No:* **UN3264**

## 2. HAZARDS IDENTIFICATION

*Classification:* **Corrosive**

*Signal Word:* **DANGER**

*Label Elements:*

### *Health Hazards:*

Acute toxicity-Inhalation Category 1

Acute toxicity - Oral Category 1

Skin corrosion/irritation Category 1A

Serious eye damage/eye irritation Category 1

Specific target organ toxicity (one exposure) Category 1 Respiratory tract irritation

### *Physical Hazards:*

Corrosive to Metals Category 1

### *Hazard Statements:*

H302 Harmful if swallowed.

H313 May be harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H333 May be harmful if inhaled.

H333 May be harmful if inhaled.

### *Precautionary Statements:*

P233 Keep container tightly closed

P234 Keep only in original container

P262 Do not get in eyes or on skin or on clothing

P270 Do not eat or drink or smoke when using this product

P280: Wear protective gloves/protective clothing/eye protection/face protection.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

<b>Chemical Name</b>	<b>CAS No</b>	<b>Weight-%</b>
Phosphoric Acid	7664-38-2	4-8%
Hydrochloric Acid	7647-01-0	10-15%
Zinc Chloride	7646-85-7	4-8%
2-Phosphono-1,2,4-Butanetricarboxylic Acid	37971-36-1	5-15%

## 4. First Aid Measures



**General Advice:**

P101: If medical advice/attention is needed; have product container this SDS, or label at hand

**Eye Contact:**

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.

**Skin Contact:**

P303/P361/P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P333/P313 If skin irritation or rash occurs: Get medical attention.

P363 Wash contaminated clothing before reuse.

**Inhalation:**

P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing

P342/P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor/911

**Ingestion:**

P310 Immediately call a POISON CENTER/doctor/911

P301/P330/P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

**Note to Physicians:** Treat symptomatically.

**Self-protection of the First Aider:** None specific. General healthcare PPE is appropriate

**5. Fire-fighting Measures**

**Flammable Properties:** Non-flammable

**Explosive Properties:** N/A

**Suitable Extinguishing Media:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media:** N/A

**Specific Hazards Arising from the Chemical:** Decomposition products may include the following materials:

Carbon oxides nitrogen oxides (NOx) Oxides of phosphorus Hydrogen chloride

**Protective Equipment and Precautions for Firefighters:**

In the event of a fire, wear full protective clothing and MSHA/NIOSH (approved or equivalent) self-contained breathing apparatus with full facepiece operated in the pressure-demand or other positive pressure mode

**6. Accidental Release Measures**

**Personal Precautions:** Ensure adequate ventilation. Keep people away from and upwind of spill leak.

Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only.

**Environmental Precautions:** If not diluted, this product may become a hazardous waste as designated by the EPA under authority of the Resource Conservation and Recovery Act (RCRA) Do not allow contact with soil, surface or ground water.

**Methods for Cleaning Up:** Stop leak if safe to do so. Contain spillage, and then collect With noncombustible

absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Flush away traces with water.

## 7. Handling and Storage

**Advice on Safe Handling:** Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Use only with adequate ventilation. Do not ingest. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Wash hands thoroughly after handling. Use only with adequate ventilation. Do not mix with bleach or other chlorinated products - will cause chlorine gas

**Storage Conditions:** Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from strong bases. Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.

**Incompatible Materials:** not determined

## 8. Exposure Controls / Personal Protection

Chemical Name	ACGIH TLV	OSHA PEL
Hydrochloric Acid	1.0 mg/m <sup>3</sup> TWA	1.0 mg/m <sup>3</sup>
Phosphoric Acid	3.0 mg/m <sup>3</sup> TWA	1.0 mg/m <sup>3</sup>

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
Phosphoric Acid	7664-38-2	TWA	1 mg/m <sup>3</sup>	ACGIH
		STEL	3 mg/m <sup>3</sup>	ACGIH
		TWA	1 mg/m <sup>3</sup>	NIOSHREI
		STEL	3 mg/m <sup>3</sup>	NIOSHREI
Hydrochloric Acid	7647-01-0	TWA	1 mg/m <sup>3</sup>	OSHAZ1
		Ceiling	2 ppm	ACGIH
		Ceiling	5 ppm	NIOSH REI
Zinc Chloride	7646-85-7	TWA (Fumes)	1 mg/m <sup>3</sup>	OSHAZ1
		TWA (Fumes)	1 mg/m <sup>3</sup>	ACGIH
		STEL (Fumes)	2 mg/m <sup>3</sup>	ACGIH
		TWA (Fumes)	1 mg/m <sup>3</sup>	NIOSHREI
		STEL (Fumes)	2 mg/m <sup>3</sup>	NIOSH REL
2-Phosphono-1,2,4-Butanetricarboxylic Acid	37971-36-1	TWA (Aerosol.)	10 mg/m <sup>3</sup>	AIHAWHEEL

**Exposure Guidelines** N/A

**Engineering Controls:** Ensure adequate ventilation, especially in confined areas

**Personal protective equipment (PPE)** Wear suitable industrial protective clothing

<b>Respiratory protection</b>	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators
<b>Eye/Face Protection:</b>	Industrial Safety Glasses and/or face shield
<b>Body Protection:</b>	P280 Wear protective gloves/protective clothing.
<b>General Hygiene Considerations:</b>	P270 Do not eat or drink or smoke when using this product P363 Wash contaminated clothing before reuse.

## 9. Physical and Chemical Properties

### 9.1. Information on basic physical and chemical properties

<b>Appearance:</b>	Clear liquid with slight inorganic odor
<b>pH:</b>	<1.0
<b>Specific Gravity:</b>	1.14
<b>Molecular Weight:</b>	Mixture
<b>Water Solubility:</b>	Completely soluble
<b>Melt/FreezePoint:</b>	Not determined
<b>Boiling Point:</b>	Not determined
<b>Flammability</b>	N/A
<b>Flash Point:</b>	N/A
<b>Vapor density:</b>	N/A

## 10. Stability and Reactivity

<b>Stability:</b>	Stable under normal conditions of use and storage
<b>Conditions to Avoid:</b>	Do not mix with bleach or other chlorinated products - will cause chlorine gas.
<b>Incompatible Materials:</b>	Bases

Contact with strong alkalis (e.g. ammonia and its solutions, carbonates, sodium hydroxide (caustic), potassium hydroxide, calcium hydroxide (lime), cyanide, sulfide, hypochlorites, chlorites) may generate heat, splattering or boiling and toxic vapors. Contact with strong oxidizers (e.g. chlorine, peroxides, chromates, nitric acid, perchlorate, concentrated oxygen, pennanganate) may generate heat, fires, explosions and/or toxic vapors.

**Hazardous Decomposition Products:** Decomposition products may include the following materials:

- Carbon oxides
- nitrogen oxides (NOx)
- Oxides of phosphorus
- HCl

Gives off hydrogen by reaction with metals.

**Possibility of Hazardous Reactions:** None known

## 11. Toxicological Information

Information on likely routes of : Inhalation, Eye contact, Skin contact exposure

### **Potential Health Effects**

Eyes Causes serious eye damage.

Skin Causes severe skin burns.

Ingestion Causes digestive tract burns.

Inhalation May cause nose, throat, and lung irritation.

Chronic Exposure Health injuries are not known or expected under normal use.

### **Experience with human exposure**

Eye contact Redness, Pain, Corrosion

Skin contact Redness, Pain, Corrosion

Ingestion Corrosion, Abdominal pain

Inhalation Respiratory irritation, Cough

Toxicity

Product

Acute oral toxicity Acute toxicity estimate: > 5,000 mg/kg

Acute inhalation toxicity Acute toxicity estimate: > 40 mg/l

Exposure time: 4 h

Acute dermal 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

Carcinogenicity no data available

Reproductive effects no data available

Germ cell mutagenicity no data available

Teratogenicity no data available

Aspiration toxicity no data available

Components

Acute dermal toxicity Phosphoric Acid I050 rabbit: > 2.000 mg/kg

STOT -repeated exposure no data available

Aspiration toxicity no data available

Components

Acute dermal toxicity Phosphoric Acid I050 rabbit: > 2.000 mg/kg

## **12. Ecological Information**

### **Ecotoxicity**

Environmental Effects Toxic to aquatic life with long lasting effects.

### **Product**

Toxicity to fish LC50 Oncorhynchus mykiss (rainbow trout): 13.5 mg/l Exposure time: 96 hrs Test substance: product  
LC50 Oncorhynchus mykiss (rainbow trout): 10.21 mg/l Exposure time: 96 hrs Test substance: Product  
NOEC Oncorhynchus mykiss (rainbow trout): 5.0 mg/l Exposure time: 96 hrs Test substance: Product  
NOEC Oncorhynchus mykiss (rainbow trout): 2.5 mg/l Exposure time: 96 hrs Test substance: Product  
Toxicity to daphnia and other aquatic invertebrates EC50 Ceriodaphnia dubia: 12.94 mg/l Exposure time: 48 hrs Test substance:  
Product  
NOEC Ceriodaphnia dubia: 6.25 mg/l Exposure time: 48 hrs Test substance: Product

#### Components

Toxicity to algae Phosphoric Acid EC50 Desmodesmus subspicatus (green algae): > 100 mg/l Exposure time: 72 h

#### Persistence and degradability

The organic portion of this preparation is expected to be inherently biodegradable.

Total Organic Carbon (TOC) : 40.000 mg/l

Chemical Oxygen Demand (COD): 430,000 mg/l

Biochemical Oxygen Demand (BOD):

Incubation Period Value

5 d 689 mg/l

Mobility

Test Descriptor

Product

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The environmental fate was estimated using a level III fugacity model embedded in the EPI (estimation program interface) Suite TM, provided by the US EPA. The model assumes a steady state condition between the total input and output. The level III model does not require equilibrium between the defined media. The information provided is intended to give the user a general estimate of the environmental fate of this product under the defined conditions of the models. If released into the environment this material is expected to distribute to the air, water and soil/sediment in the approximate respective percentages:

Air <5%

Water : 30-50%

Soil : 50 -70%

The portion in water is expected to be soluble or dispersible.

#### Bioaccumulative potential

This preparation or material is not expected to bioaccumulate.

#### Other information

no data available

#### 13. Disposal Considerations

If this product becomes a waste, it could meet the criteria of a hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Before disposal, it should be determined if the waste meets the criteria of a hazardous waste.

Hazardous Waste: D002

Disposal methods The product should not be allowed to enter drains, water courses or the soil. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in

an approved waste disposal facility.  
Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

**14. Transport information (USDOT):**

The presence of an RQ component (Reportable Quantity for U.S. DOT) in this product causes it to be regulated with an additional description of RQ for road, or as Environmentally hazardous for road and air, ONLY when the net weight in the package exceeds the calculated RQ for the product.

**Proper shipping Name:** CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.  
**Technical name(s):** Zinc Chloride, Hydrochloric Acid, Phosphoric Acid  
**Hazard Class:** Corrosive (8)  
**UN/ID No** UN3264  
**Packing Group** III  
**Reportable Quantity (RQ)** 33,333 lbs (calculated)  
**Component:** Zinc Chloride



**15. Regulatory Information**

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**EPCRA -Emergency Planning and Community Right-to-Know Act**

**CERCLA Reportable Quantity**

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Zinc Chloride	7646-85-7	1000	33333

**SARA 304 Extremely Hazardous Substances Reportable Quantity**

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Hydrochloric Acid	7647-01-0	5000	132031

**National Fire Protection Association (NFPA) Ratings:**

**NSF Certification:** N/A



**16. Other Information**

This Safety Data Sheet compiled from information provided by the raw chemical product manufacturers. The Information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief

at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with *any* other materials or in *any* process, unless specified in the *text*.