

MERAS ENGINEERING INC 2401 E ORANGEBURG AVE MODESTO, CA 95355

**SAFETY DATA SHEET****SECTION 1 - IDENTIFICATION****Product Identifier:** MERAS 6103**Product Code:** 6103**Chemical Family:** Cooling Water Additive

**MERAS ENGINEERING INC**  
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 MODESTO, CA 95355  
 (415)240-4918

**24 Hr. Emergency Tel.#:** 800-262-8200**SECTION 2 - HAZARDS IDENTIFICATION****Classification of the Substance or Mixture:**

Eye Irritation - Category 2  
 Skin Irritation - Category 2  
 Acute Toxicity - Oral Category 5

**Signal Word:** WARNING**Hazard Statements:**

Causes serious eye irritation  
 Causes skin irritation  
 May be harmful if swallowed

**Precautionary Statements:**

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

**IF SWALLOWED:** Rinse mouth. Do NOT induce vomiting.

**IF ON SKIN (or hair):** Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

**IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

**SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS**

Ingredient	CAS Number	Concentration
HYDROXYPROPYL METHARCYLAMIDE	94228-52-1	1-3%
PHOSPHONOBUTANE TRICARBOXYLIC ACID	37971-36-1	1-3%
PHOSPHORIC ACID	7664-38-2	3-5%
ZINC CHLORIDE	7646-85-7	3-5%

**SECTION 4 - FIRST-AID MEASURES**

**Inhalation:** Remove source of exposure or move person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER/doctor. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by the POISON CENTER/doctor.

**Skin Contact:** Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash with plenty of lukewarm, gently flowing water with a flushing duration of 15-20 minutes. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before re-use or discard.

**Eye Contact:** Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or into the face. If eye irritation persists: Get medical advice/attention.

**Ingestion:** Rinse mouth. If you feel unwell, or if concerned: Get medical advice/attention.

**Most Important Symptoms and Effects, both Acute and Delayed:** Contact with eye can cause irritation. Contact with skin can cause irritation.

**Indication of any Immediate Medical Attention and Special Treatment Needed:** Treat symptomatically

**SECTION 5 - FIRE-FIGHTING MEASURES**

**Extinguishing Media:** Material is not flammable. Use extinguisher media appropriate for material in surrounding fire.

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**Special hazards arising from the substance of mixture:** Emits toxic fumes under fire conditions.

**Flammability classification (OSHA 29 CFR 1910.106) (Hazcom 2012):** Non flammable

**Hazardous Combustion Products:** Non combustible

**Special protective equipment and precautions for firefighters:** In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus.

### SECTION 6 - ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:** Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

**Methods and materials for containment and cleaning up:** SMALL SPILLS (less than 1 gallon): May be flushed to an approved sewer line (with large amounts of water). Larger spills should be absorbed and collected for disposal. Ensure adequate decontamination of tools and equipment following clean up.

**Special spill response procedures:** Prevent from entering sewers, waterways, or low areas.

### SECTION 7 - HANDLING AND STORAGE

**Precautions for Safe Handling:** Wear at least chemical resistant gloves and eye protection, face shield, and chemical resistant garments when handling, moving or using this product. Do not contaminate water, food, or feed by storage or disposal.

**Conditions for Safe Storage:** Keep product in tightly closed container when not in use. Do not drop, roll or skid drum.

**Incompatible materials:** Oxidizing agents and strong bases

### SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

**Ventilation and engineering measures:** Forced air, local exhaust, or open air is adequate.

**Respiratory Protection:** Not a respiratory irritant unless dealing with a mist form, then wear appropriate NIOSH respirator.

**Skin Protection:** Wear chemical resistant gloves and chemical resistant garments when handling, wash garments before re-use.

**Eye/Face Protection:** Wear chemical goggles; also wear a face shield if splashing hazard exists.

**Other Protective Equipment:** Eye wash facility and emergency shower should be in close proximity.

**General Hygiene Conditions:** Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Remove and wash contaminated clothing before re-use. Handle in accordance with good industry hygiene and safety practice.

### SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Pale yellow clear liquid.

**Odor:** Odorless

**pH:** 3.0-4.0

**Melting/Freezing point:** No information available.

**Initial boiling point and boiling range:** No information available.

**Flammability (solid, gas):** Non flammable.

**Relative density:** 1.10 g/mL

**Solubility in Water:** Complete

**Decomposition temperature:** No information available.

**Viscosity:** 10-25 cSt at 20°C / 68°F

### SECTION 10 - STABILITY AND REACTIVITY

**Reactivity:** Reactive with oxidizing agents, reducing agents, organic material, metals, bases and alkalis.

**Chemical Stability:** Stable under normal conditions

**Possibility of Hazardous Reactions:** May react with incompatible materials

**Conditions to Avoid:** Incompatible materials

**Incompatible Materials:** Alkalis, oxidizing agents, metals, bases and organic materials.

**Hazardous Decomposition Products:** Potentially dangerous phosphorous oxides.

### SECTION 11 - TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure:**

Routes of entry - inhalation: YES

Routes of entry - skin & eye: YES

Routes of entry - ingestion: YES

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Routes of entry - skin absorption: NO

## Potential Health Effects:

### Signs and symptoms of short term (acute) exposure:

**Inhalation:** May cause irritation to respiratory system in mist/vapor form.

**Ingestion:** May cause nausea, vomiting, abdominal pain, gastrointestinal tract burns, gastrointestinal upset and/or diarrhea.

**Skin:** May cause skin irritation including redness, edema, swelling, rash, scaling or blistering, drying and/or cracking of skin.

**Eye:** May cause redness, stinging, tearing, swelling, itching and/or irritation of the eye. Possible eye damage if left untreated.

## Potential Chronic Health Effects:

**Mutagenicity:** Not known to have mutagenic effects in humans or animals.

**Carcinogenicity:** Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

**Reproductive effects:** No known reproductive effects in humans or animals.

**Sensitization to material:** Not a known sensitizer in humans or animals.

**Specific target organ effects:** May cause damage to the following organs: blood, liver, skin, eyes, bone marrow.

**Toxicological data:** The calculated ATE values for this mixture are:

ATE oral = >2000 mg/kg

ATE dermal = >10000 mg/kg

ATE inhalation = No information available.

## SECTION 12 - ECOLOGICAL INFORMATION

**Ecotoxicity:** Not expected to be toxic to the environment.

**Persistence and degradability:** Not expected to persist. Readily biodegradable.

**Bioaccumulation potential:** Not expected to bioaccumulate.

**Mobility in soil:** No information available.

## SECTION 13 - DISPOSAL CONSIDERATIONS

**Handling for disposal:** Do not contaminate water, food, or feed by storage and/or disposal. When handling refer to protective measures listed in sections 7 and 8. Empty residue from containers, rinse container well.

**Method of disposal:** Dispose of in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.

**RCRA:** Not a listed RCRA hazardous waste.

## SECTION 14 - TRANSPORTATION INFORMATION

Certain shipping modes or package sizes may have exceptions from the transport regulations. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.

Please note the GHS and DOT Standards are NOT identical and therefore can have varying classifications

**US 49 CFR/DOT/IATA/IMDG Information:** Non hazardous material

**Environmental hazards:** Not a Marine Pollutant

## SECTION 15 - REGULATORY INFORMATION

### US Federal Information:

**US CERCLA Reportable quantity (RQ):** Phosphoric acid has a RQ of 1000 pounds. Zinc chloride has a RQ of 1000 pounds.

**SARA Title III:** No chemicals in this product are subject to SARA Title III reporting.

## SECTION 16 - OTHER INFORMATION

### Legend:

**SARA:** The Superfund Amendments and Reauthorization Act

**RCRA:** Resource Conservation and Recovery Act

**TSCA:** Toxic Substances Control Act

## **SAFETY DATA SHEET**

**CFR:** Code of Federal Regulations

**DOT:** Department of Transportation

**ATE:** Acute Toxicity Estimate

**Preparation date:** 2/27/2014