

MERAS ENGINEERING INC 2401 E ORANGEBURG AVE MODESTO, CA 95355

# SAFETY DATA SHEET

## SECTION 1 - IDENTIFICATION

**Product Identifier:** MERAS 5310

**Product Code:** R272

MERAS ENGINEERING INC  
2401 E ORANGEBURG AVE #675  
MODESTO, CA 95355  
(415)240-4918

**24 Hr. Emergency Tel.#:** 800-262-8200

## SECTION 2 - HAZARDS IDENTIFICATION

**Classification of the Substance or Mixture:**

Skin Corrosion - Category 1

Serious Eye Damage - Category 1

Acute Toxicity - Oral Category 4

Hazardous to the Aquatic Environment, Acute Toxicity Category 1


**Signal Word:** DANGER

**Hazard Statements:**

Causes severe skin burns and eye damage

Harmful if swallowed

Very toxic to aquatic life

**Precautionary Statements:**

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

Wash thoroughly after handling

**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
AMMONIUM HYDROXIDE	1336-21-6	20%

## 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 immediately contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Rinse skin with lukewarm, gently flowing water/shower with a flushing duration of 30 minutes. Immediately call POISON CENTER/doctor. Wash contaminated clothing before re-use.

**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 30 minutes. Take care not to rinse contaminated water into the unaffected eye or into the face. Immediately call a POISON CENTER/doctor.

**Ingestion:** Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. If vomiting occurs naturally, lie on your side, in the recovery position.

**Most Important Symptoms and Effects, both Acute and Delayed:** Contact with skin/eyes can cause irritation or severe burns and scarring with greater exposures. Causes irritation of eyes, and with greater exposures it can cause burns that may result in permanent impairment of vision, even blindness. Indication of any immediate medical attention and special treatment needed: Treat symptomatically

## SECTION 5 - FIRE-FIGHTING MEASURES

**Extinguishing Media:** Use water spray, powder, foam, carbon dioxide.

**Special hazards arising from the substance or mixture:** Non combustible. May give off irritating or toxic fumes (or gases) in a fire.

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

**Hazardous Combustion Products:** Toxic nitrogen oxides

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

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### 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, after neutralization with dilute/weak acid, 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. Store in a cool, dry, well-ventilated area away from heat or open flame.

**Incompatible Materials:** Avoid acids and/or strong oxidizers when using or storing this product.

### SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

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

**Respiratory Protection:** In case of confined spaces or high levels encountered in the air, wear self contained breathing apparatus.

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

**Eye/Face Protection:** Wear safety glasses, goggles and/or face shield to prevent eye contact.

**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:** Colorless clear liquid.

**Odor:** Pungent odor.

**pH:** <10

**Melting/Freezing point:** -76 °F/ -60 °C

**Initial boiling point and boiling range:** IBP 100 °F/ 37 °C

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

**Relative density:** 0.94 g/mL

**Solubility in Water:** Complete

**Decomposition temperature:** No information available.

**Viscosity:** 5-15 cSt at 68 °F/ 20 °C

### SECTION 10 - STABILITY AND REACTIVITY

**Reactivity:** Reactive with certain acids, reducing agents, organic materials, metals, bases and alkalis.

**Chemical Stability:** Stable under normal conditions

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

**Conditions to Avoid:** Incompatible materials and high temperatures

**Incompatible Materials:** Avoid acids or strong oxidizers when using or storing this product.

**Hazardous Decomposition Products:** Nitrogen 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

Routes of entry - skin absorption: NO

**Potential Health Effects:**

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

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**Inhalation:** Severe irritant. Effect from inhalation of mist vary from mild irritation to serious damage of the upper respiratory tract, depending on severity of exposure. Symptoms may include sneezing, sore throat or runny nose. Severe pneumonitis may occur. Inhalation of vapors irritates the respiratory tract. Exposure to high concentrations has a narcotic effect, producing symptoms of dizziness, drowsiness, headache staggering and/or unconsciousness.

**Ingestion:** Corrosive! Swallowing causes severe burns of mouth, throat, and stomach. Severe scarring of tissue, corrosion, permanent tissue destruction and death may result. Symptoms may include severe pain, nausea, vomiting, diarrhea, shock, hemorrhaging and/or fall in blood pressure. Damage may appear days after exposure.

**Skin:** Corrosive! Contact with skin causes irritation or severe burns and scarring with greater exposures.

**Eye:** Corrosive! Causes irritation of eyes, and with greater exposures it can cause burns that may result in permanent impairment of vision, even blindness.

### Potential Chronic Health Effects:

**Mutagenicity:** No known effect on humans or animals

**Carcinogenicity:** Not expected to be a carcinogen or tumorigen.

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

**Sensitization to material:** Severe allergic reactions may occur in sensitized individuals.

**Specific target organ effects:** No information available

**Medical conditions aggravated by overexposure:** No information available

### Toxicological data:

ATE oral = No information available.

ATE dermal = No information available.

ATE inhalation (vapors) = No information available.

## SECTION 12 - ECOLOGICAL INFORMATION

**Ecotoxicity:** May be harmful to aquatic environment.

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

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

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

**Other Adverse Environmental effects:** 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:** If product becomes a waste, it does meet the criteria of a hazardous waste as defined by the US EPA, because of: Corrosivity D002

## 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

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### US 49 CFR/DOT/IATA/IMDG Information:

UN No.: 2672

UN Proper Shipping Name: Ammonium hydroxide

Transportation hazard class(es): 8

Packing Group: III

## SECTION 15 - REGULATORY INFORMATION

**Environmental hazards:** Not a Marine Pollutant

15 - REGULATORY INFORMATION

### US Federal Information:

**TSCA information:** All components are listed on the TSCA inventory.

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**US CERCLA Reportable quantity (RQ):** Ammonium hydroxide has a RQ of 1000 pounds of pure chemical.

**SARA Title III:** Acute Health Hazard

**US State Right to Know Laws:**

**International Information:**

### SECTION 16 - OTHER INFORMATION

**Legend:**

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

**RCRA:** Resource Conservation and Recovery Act

**TSCA:** Toxic Substances Control Act

**CFR:** Code of Federal Regulations

**DOT:** Department of Transportation

**ATE:** Acute Toxicity Estimate

**Preparation date:** 8/28/2015