

MERAS ENGINEERING INC 2401 E ORANGEBURG AVE MODESTO, CA 95355

SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION

Product Identifier: MERAS 5770

Product Code: 6041

Chemical Family: Alkali Metal Hydroxide

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

Corrosive to Metals - Category 1

Acute Toxicity - Oral Category 4



Signal Word: DANGER

Hazard Statements:

Causes severe skin burns and eye damage

May be corrosive to metals

Harmful if swallowed

Precautionary Statements:

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

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

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

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS Number	Concentration
SODIUM HYDROXIDE	1310-73-2	25-30%

SECTION 4 - FIRST-AID MEASURES

Inhalation: Get medical advice/attention if you feel unwell or are concerned.

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 60 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 60 minutes. Take care not to rinse contaminated water into the unaffected eye or into the face. Immediately call a POISON CENTER/doctor. Continue rinsing until medical aid is available.

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

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: Hot or molten material can react violently with water. Can react with certain metals, such as aluminum, to generate flammable Hydrogen gas.

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

Hazardous Combustion Products: May cause fire and explosions when in contact with incompatible materials.

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.

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Methods and materials for containment and cleaning up: Contain and recover liquid when possible. Do not let product enter drains. Residues from spills can be diluted with water, neutralized with dilute acid and collected with dry earth, sand or other non-combustible material and disposed of in appropriate container.

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 strong oxidizing agents, soft metals, acids, and heat.

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 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.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Colorless clear liquid.

Odor: Odorless

pH: >12

Melting/Freezing point: -16°C / 3°F

Initial boiling point and boiling range: 120°C / 248°F

Flammability (solid, gas): Non flammable

Specific gravity: 1.32 g/mL

Solubility in water: Complete

Decomposition temperature: No information available

Viscosity: 10-40 cSt at 20 °C/68°F

SECTION 10 - STABILITY AND REACTIVITY

Reactivity: Reactive with oxidizing agents, reducing agents, metals, acids and alkalis.

Chemical Stability: Stable under normal conditions

Possibility of Hazardous Reactions: Reactive with oxidizing agents, reducing agents, metals, acids and alkalis.

Conditions to Avoid: Incompatible materials

Incompatible Materials: Contact with acids and organic halogen compounds, especially Trichloroethylene, may cause violent reactions.

Hazardous Decomposition Products: Sodium Oxide. Decomposition by reaction with certain metals releases flammable and explosive Hydrogen gas.

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

Potential Health Effects:

Signs and symptoms of short term (acute) exposure:

Inhalation: Inhalation of the mist may produce severe irritation of respiratory tract, characterized by coughing, choking, shortness of breath, headaches, dizziness, nausea, weakness and/or drowsiness.

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:

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

Specific target organ effects: No information available

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

ATE oral = 363 mg/kg (rat)

ATE dermal = 5000 mg/kg (rabbit)

ATE inhalation (vapors) = No information available

SECTION 12 - ECOLOGICAL INFORMATION

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

Bioaccumulation potential: Not expected to bioaccumulate.

Mobility in soil: Soluble in water and mobile in soil.

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:

UN No.: 1760

UN Proper Shipping Name: Corrosive liquid, n.o.s., (Sodium Hydroxide)

Transportation hazard class(es): 8

Packing Group: III

Environmental hazards: Not a Marine Pollutant

SECTION 15 - REGULATORY INFORMATION

US Federal Information:

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

US CERCLA reportable quantity (RQ): Sodium hydroxide has a RQ of 1000 pounds of pure chemical.

SARA Title III: Acute Health Hazard

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

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