

MERAS ENGINEERING INC 2401 E ORANGEBURG AVE MODESTO, CA 95355

SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION

Product Identifier: MERAS 5461

Product Code: 6126

Product Use: Alkaline Boiler Additive

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 Irritation - Category 2

Eye Irritation - Category 2

Acute Toxicity - Oral Category 5



Signal Word: WARNING

Hazard Statements:

Causes skin irritation

Causes serious eye irritation

May be harmful if swallowed

Precautionary Statements:

Prevention

Wash hands thoroughly after handling

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

Do not eat, drink or smoke when using this product.

Response

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

IF ON SKIN: Wash with soap and water.

IF SKIN IRRITATION OCCURS: Get medical advice/attention.

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

IF EYE IRRITATION PERSISTS: Get medical advice/attention.

Take off contaminated clothing and wash before reuse

Specific treatment (see section 4 First Aid).

Hazards not Otherwise Classified:

No other hazards classified.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	Synonym	CAS Number	Concentration
SODIUM HYDROXIDE	CAUSTIC SODA	1310-73-2	3-6%
SODIUM SULFITE	N/A	7757-83-7	7-9%
DIETHYLAMINOETHANOL	DEA	100-37-8	2-4%

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.

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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. 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 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: 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: 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): Dike small spills with inert material (sand, earth, etc.). Collect in plastic containers only. Wash area and let dry. LARGE SPILL: Should be diked with sand ahead of spill. Collect in plastic containers only. Ensure adequate decontamination of tools and equipment following clean up.

Special spill response procedures: Collect spills in plastic containers only

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: Store in a cool, dry, well ventilated place away from direct sunlight. Keep container closed when not in use.

Incompatible Materials: Avoid strong oxidizing agents, soft metals, acids, and heat.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Identity	CAS Number	Type	Exposure Limit Values	Source
SODIUM HYDROXIDE	1310-73-2	PEL	2 mg/m3	OSHA
		REL	2 mg/m3	NIOSH
		TLV	2 mg/m3	ACGIH

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 brown clear liquid.

Odor: Pungent odor.

pH: >12.0

Melting/Freezing point: No information available.

Flammability (solid, gas): Non flammable.

Specific gravity: 1.05 g/mL

Solubility in water: Complete

Viscosity: 10-25 cSt at 20°C / 68°F

SECTION 10 - STABILITY AND REACTIVITY

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

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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, acids and organic materials.

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

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:

Carcinogenicity: No components are listed as carcinogens by ACGIH, IARC, OSHA, or NTP.

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

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 specific target organ effects.

Medical conditions aggravated by overexposure: No information available

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

ATE oral = 3505 mg/kg

ATE dermal = >5000 mg/kg

ATE inhalation = 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.

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

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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.

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

Preparation Date: 9/1/2016