

MAY 08 2015

Material Safety Data Sheet

Product Name: RG101: Alkalinity-1 (Alk-1)

Revision Date: July 7, 2011

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Section #1: Chemical Product and Company Identification

Product Name: RG101: Alkalinity-1 (Alk-1)

Manufacturer / Distributor: Enerco Corporation

Address: 317 N. Bridge St., Grand Ledge, MI 48837

Telephone: (800) 292-5908

Fax: (517) 627-8037

For chemical emergency - spill, leak, fire, exposure or accident - call CHEMTREC - day or night - (800) 424-9300

Section #2: Composition/Information on Ingredients

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Weight %</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
<input checked="" type="checkbox"/> Isopropyl alcohol	67-63-0	<60%	980 mg/m ³	480 mg/m ³
<input checked="" type="checkbox"/> Phenolphthalein	77-09-8	<1%	unknown	unknown

☒ Indicates hazardous substances. Remainder of components comprise proprietary information. This document is prepared pursuant to the OSHA Hazard Communication Standard, 29 CFR 1910.1200. In addition, other substances not "hazardous" per this OSHA standard may be listed.

Section #3: Hazards Identification

EMERGENCY OVERVIEW: May be an irritant to eyes, skin, and mucous membranes. May be sensitizer to skin. May be absorbed through skin. Flammable liquid.

Potential Health Effects: See Section 11 For Toxicological Data.

Effects of Acute Exposure: Eyes: May be an irritant.

Skin: May be an irritant, sensitizer or a permeator.

Inhalation: May be an irritant.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Effects of Chronic Exposure: Repeated or prolonged exposure to the substance can produce target organ (kidney, liver, skin, CNS) damage. Severe overexposure can cause headache, drowsiness, confusion, loss of coordination, unconsciousness and death.

Medical Conditions Generally Aggravated by Exposure: Pre-existing eye and/or skin irritation, respiratory, and/or digestive disorders.

Section #4: First Aid Measures

Eye: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid.

Skin: In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if irritation develops and persists. Wash clothing before reuse.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Ingestion: Potential for aspiration if swallowed. Get medical aid immediately. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If vomiting occurs naturally, have victim lean forward.

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Section #5: Fire-Fighting Measures

NFPA Hazard Codes - (Health / Flammability / Reactivity):

1 / 3 / 0

NFPA Code Legend

4 - Severe Hazard
3 - Serious Hazard
2 - Moderate Hazard
1 - Slight Hazard
0 - Minimal Hazard

Flash Point: 73.4°F Open Cup

Flammable Limits: 2%Lower,12.7%Upper

Extinguishing Media: Do not use straight streams of water. Use dry chemical, carbon dioxide, alcohol-resistant foam, or water spray. Cool containers with flooding quantities of water until well after fire is out.

Special Fire Fighting Procedures: Fire fighters should wear full protective gear including self-contained breathing apparatus.

Unusual Fire and Explosive Hazards: Highly flammable in presence of open flames, sparks, or heat. Vapor may travel considerable distance to source of ignition and flash back. Caution: may burn with near invisible flame.

Section #6: Accidental Release Measures

Spill and Leak Procedure: Small spill: dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.
Large spill: Flammable liquid. Keep away from heat. Keep away from sources of ignition. Absorb with DRY earth, sand or other non-combustible material. Prevent entry into sewers, basements or confined areas; dike if needed. A vapor suppressing foam may be used to reduce vapors.

Disposal: Dispose of in accordance with all applicable federal, state, and local health and environmental standards and regulations.

Section #7: Handling and Storage

Precautions to be Taken in Handling: Avoid contact with eyes, skin, and clothing.
Keep container tightly closed when not in use.
Avoid breathing vapor.
Wash thoroughly after handling.
Keep away from heat, sparks, and sources of ignition.
Do not ingest.
Keep away from oxidizing agents and acids.

Precautions to be Taken in Storage: Normal shelf life 1 year.
Store in a cool, well ventilated, dry, secure place.
Do not store with or near food supplies or potable water.
Avoid all possible sources of ignition (spark or flame).
Keep container tightly closed until ready to use.

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Section #8: Exposure Controls / Personal Protection

- Ventilation:** If user operations generate airborne material, use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne concentration of vapors below exposure limits.
- Eye Protection:** Chemical splash goggles and/or face shield.
Eyewash fountain in the work place is strongly recommended.
- Skin Protection:** Chemical resistant gloves.
Shower in the work place is strongly recommended.
- Respiratory Protection:** Respiratory protection may be required for work areas where exposure by inhalation may occur and engineering, work practice or other means of exposure reduction are not adequate to keep airborne levels below the exposure limits.
- Other Protection Equipment:** Any other protective clothing or use of equipment necessary to prevent eye and skin contact.
- Permissible Exposure Limits:** OSHA PEL: 980 mg/m³ for Isopropyl Alcohol
ACGIH: 490 mg/m³ for Isopropyl Alcohol

Section #9: Physical and Chemical Properties

- | | |
|---|---|
| Appearance: Clear Liquid | Boiling Point (deg. F): 180.5°F @760 Mm Hg |
| Odor: Slight | Vapor Pressure: 33 Mm Hg @ 20°C |
| pH (1% sol'n, unless noted): Neutral | Vapor Density: 2.1 (Air = 1) |
| Solubility in Water: Soluble | Evaporation Rate: 1.7 (N-butyl Acetate=1) |

Section #10: Stability and Reactivity

- Chemical Stability:** Stable
- Conditions to Avoid:** Heat, Ignition Sources (Sparks, Flames, Etc)
- Incompatibility:** Oxidizing Agents, Acids
- Hazardous Decomposition Products:** None Known
- Hazardous Polymerization:** Will Not Occur

Section #11: Toxicological Information

May be an irritant to eyes, skin, and mucous membranes. May be sensitizer to skin. May be absorbed through skin.
Flammable liquid.

For Isopropyl Alcohol: acute oral toxicity (LD50) - 3600 mg/kg Mouse

For Isopropyl Alcohol: acute dermal toxicity (LD50) - 12800 mg/kg Rabbit

Ingredients as Carcinogens: Phenolphthalein powder: NTP rating - classified 2 (reasonably anticipated), IARC rating - classified 2B (possible for human)

Section #12: Ecological Information

The product itself and its products of degradation are no toxic.

Section #13: Disposal Considerations

Best route is to use product for its originally intended purpose. Dispose of in accordance with all applicable environmental standards and in accordance with all local, state, and federal laws and regulations.

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Section #14: Transport Information

DOT Proper Shipping Name: Flammable Liquid, N.O.S., (contains Isopropyl Alcohol)

DOT Hazard Class: 3

DOT UN Number: UN1993

DOT Label:

DOT Packing Group: II

The shipping name listed above applies to a 55 gallon drum of the product. This product may have more than one proper shipping name, depending on packaging, product properties, and mode of shipment.

Section #15: Regulatory Information

TSCA: All Ingredients Are On The TSCA Inventory Or Are Not Required To Be Listed On The TSCA Inventory.

RCRA Hazard Class: No Components Of This Product Are Listed.

CERCLA RQ: No Components Of This Product Are Listed.

SARA Title III

Extremely Hazardous Substance: No Components Of This Product Are Listed.

Hazardous Substance: Hazard Due To: Irritant

Hazard Categorization:

<input type="checkbox"/> Sudden Release of Pressure	<input checked="" type="checkbox"/> Immediate (Acute) Health
<input type="checkbox"/> Reactive	<input type="checkbox"/> Delayed (Chronic) Health
<input type="checkbox"/> Fire	

Section 313 Chemicals: This product contains the following EPCRA Section 313 chemical subject to the reporting requirements of Section 313 of The Emergency Planning and Community Right-To-Know of 1986(40CFR372)

CAS#	Chemical Name
77-09-8	Phenolphthalein

This information should be included in all MSDS's that are copied and distributed for this material.

STATE RIGHT-TO-KNOW

CHEMICAL NAME	CAS NUMBER	LIST
Isopropyl Alcohol	67-63-0	MA,MN,NJ1,PA1,PA3

MA=Massachusetts Hazardous Substance MN=Minnesota Hazardous Substance NJ1=New Jersey RTK Hazardous Substance PA1=Pennsylvania Hazardous Substance (present at greater than or equal to 1.0%) PA3=Pennsylvania Environmental Hazardous Substance (present at greater than or equal to 1.0%)

Section #16: Other Information

This product is a testing reagent. The use rate is drops to mls. per day. The normal amount purchased is = or < a qu

We believe that the statements, technical information, and recommendations contained herein are reliable. However, since data, safety standards, and government regulations are subject to change and conditions of handling and of use or misuse are beyond our control, since health and safety precautions given may not be adequate for all individuals and/or situations, we make no warranty, either expressed or implied, with respect to the continuing accuracy of the information contained herein.