MATERIAL SAFETY DATA SHEET

Distributed by: HILLYARD, INC.

302 N. Fourth St. St. Joseph, Missouri 64502



Product Name: Boiler Treatment H-20

EMERGENCY PHONE #: 1-800-424-9300 (CHEMTREC)

I. IDENTIFICATION

DOT Shipping Name

Sodium Hydroxide Solution

Chemical Family:

Not applicable (mixture).

Chemical Name And Synonyms:

Alkali.

DOT Hazard Class & I.D. Number

Corrosive Material UN1824

PG

11

8

NA: Not applicable

II. HAZARDOUS INGREDIENTS

Component Sodium hydroxide CAS NO. 1310-73-2 % 12

TLV 2 mg/M3

PEL 2 mg/M3 Toxic NA

Hazard

Corrosive to skin and eyes.

**Toxic chemical subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know

Act of 1986 (40 CFR §372).

III. PHYSICAL DATA

Form: Liquid.

pH, 1% Soln.: 12.2

Boiling Point: Above 220° F. Specific Gravity: 1.133

Solubility In Water: Complete.

Appearance: Clear, dark brown liquid.

Odor: Slight lignin.

IV. FIRE AND EXPLOSION HAZARD DATA

Flashpoint: >200°F

Extinguishing Media: Not applicable.

Special Fire

Fighting Procedures: Although this product is not combustible, if a fire occurs in the near vicinity, good fire-fighting practice dictates the use of self-contained

breathing apparatus and other protective gear.

Unusual Fire And

Explosion Hazards: If the stock solution container breaks, the solution should be handled with care as it is corrosive.

V. HEALTH HAZARD DATA

Carcinogenic: The raw materials used in this product are not considered to be a carcinogen by ACGIH and OSHA.

Effects Of Over-exposure: Corrosive. May cause severe burns or irritation. May cause irreversible damage to eyes in some cases.

Emergency And First

Aid Procedures: EYES: Flush immediately with water for 15 minutes. Raise eyelids for complete rinsing. GET PROMPT MEDICAL ATTENTION. SKIN: Flush with water for 15 minutes. Remove and wash contaminated clothing before reuse. If irritation persists, GET MEDICAL

ATTENTION

INGESTION: Do not induce vomiting. Give large quantities of water or milk. GET IMMEDIATE MEDICAL ATTENTION. Never give

anything by mouth to an unconscious person.

INHALATION: Remove victim to fresh air. If breathing difficulty occurs or persists, get medical attention.

* NFPA Degree or Hazard: 4 = Extreme; 3 = High; 2 = Moderate; 1 = Slight; 0 = Insignificant, Continued On A. Safety Glasses, Gloves C. Safety Glasses, Gloves, Apron D. Face Shield, Gloves, Apron E. Safety Glasses, Gloves, Dust Respirator F. Safety Glasses, Gloves, Apron, Vapor Respirator F. Safety Glasses, Gloves, Apron, Vapor Respirator I. Safety Glasses, Gloves, Apron, Vapor Respirator J. Splash Goggles, Gloves, Apron, Vapor and Dust Respirator K. Air Line, Hood or Mask, Gloves, Full Suit, Boots X. Ask your supervisor for guidance. Continued On Back Page 2; PRODUCT NAME: Boiler Treatment H-20

VI. REACTIVITY DATA

Stability - Unstable: Stable: X

Conditions To Avoid: Do not mix with acids.

Incompatibility: Reacts vigorously with strong acids, strong oxidizers.

(Materials To Avoid)

Hazardous

Decomposition Products: Oxides of carbon

VII. SPILL OR LEAK PROCEDURES

Steps To Be Taken In Case Material Is Released Or Spilled:

Small spills can be diluted with a large amount of water and flushed to sanitary sewer. For large spills, dike, and removed liquid with a vacuum truck or on absorbent. Neutralize the remaining product with dilute acid. Flush spill area with water, followed by liberal covering of sodium carbonate. Evacuate unnecessary personnel. Do not discharge to streams or sewers.

Waste Disposal Method: Dispose according to governmental regulations.

VIII. SPECIAL PROTECTION INFORMATION

Respiratory Protection: Not required for normal use. If mist level is high, wear NIOSH approved respirator.

Ventilation: Should be adequate to keep mist level below the TLV.

Protective Gloves: Rubber or chemical resistant.

Eye Protection: Chemical goggles.

Protective Clothing: Wear protective clothing along with rubber shoes or boots.

IX. SPECIAL PRECAUTIONS

Precautions To Be Taken In Handling And Storing:

Wear protective equipment. Wash thoroughly after handling. Keep container closed when not in use.

Other Precautions: Safety shower and eyewash stations should be provided in the areas where this product is handled.

X. REVISED INFORMATION

MSDS Status: EMERGENCY AND FIRST AID PROCEDURES: Added inhalation warning.

Revised: 3/6/2002 Imi

Supersedes: 6/21/1999

The opinions expressed herein are those of qualified experts within ANDERSON Chemical Company. We believe that the information contained herein is current as of the date of this Material Safety Data Sheet. Since the use of this information and these opinions and the conditions of use of the product are not within the control of ANDERSON Chemical Company, it is the user's obligation to determine the conditions of safe use of the product.