# UNITED 310



# **MATERIAL SAFETY DATA SHEET**

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To Reorder Call: 800-323-2594

# 1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME UNITED 310 USE/DESCRIPTION Boiler Treatment For Steam Boilers FOR MEDICAL AND TRANSPORTATION EMERGENCIES 24 Hour INFOTRAC (US and CANADA): 800-535-5053 REVISION DATE March 12, 2008



# 2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients	CAS#	%Range	ACGIH (TLV-TWA)	OSHA (PEL-TWA)	LD50 (Species/Route)	LC50 (Species)
Sodium Hydroxide	1310-73-2	3-7	NE	NE	85 mg/kg (Rat/oral)	NE

# 3. HAZARDS IDENTIFICATION

Eyes: Causes severe burns; small quantities can result in permanent damage and/or loss of vision.

Skin: Corrosive action causes burns and frequently deep ulceration with subsequent scarring. Prolonged contact destroys tissue. Mist from solutions can cause irritant dermatitis.

**Inhalation:** Inhalation of mists can cause damage to the upper respiratory tract and to the lung tissue depending on extent of exposure. Effects can range from mild irritation of mucous membranes, severe pneumonitis and destruction of lung tissues.

If Swallowed: Ingestion can cause very serous damage to the mouth, esophagus, stomach and other tissues with which contact is made and may be fatal.

## 4. FIRST AID MEASURES

**Eyes:** Flush with plenty of cool water for at least 15 minutes while holding eyelids open Apply mild boric acid solution if available and call a physician or poison control center immediately.

Skin: Wash with soap and water; apply mild boric acid solution if available. Call a physician or poison control center.

Inhalation: Remove to fresh air. Apply CPR if needed. Call a physician or poison control center immediately.

**If Swallowed:** DO NOT induce vomiting. If conscious, give large quantities of water. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

#### 5. FIRE FIGHTING MEASURES

Flash Point (TCC): None Explosive Limits: Lower (LEL): ND Upper (UEL): ND

Flame Projection (Aerosol): N/A

Hazardous Products of Combustion: When strongly heated, as in a fire, this product may produce carbon dioxide, carbon monoxide and oxides of phosphorous.

Fire and Explosion Hazards: Contact with some metals, particularly magnesium, aluminum and (galvanizing) zinc, can generate flammable hydrogen gas.

Extinguishing Media: Water, Dry foam, Carbon dioxide.

**Fire Fighting Instructions:** Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

# 6. ACCIDENTAL RELEASE MEASURES

**Small Spills:** Eliminate all sources of ignition. Clean up with a non-flammable sorbent such as clay or vermiculite and place in a labeled, closed metal container for proper disposal.

Large Spills: Eliminate all sources of ignition. Dike spill and reclaim if possible. Flush with a large quantity of water and neutralize with diluted acid solution. Dispose of properly neutralized (ph 6-9) salt solution in accordance with local, state and federal regulations.

#### 7. HANDLING AND STORAGE

Keep container tightly closed when not in use. Store in a cool, well ventilated out of direct sunlight. Store away from incompatible materials. Do not store in unlabeled or mislabeled containers. Wash hands and face with soap and water after handling this product. Remove contaminated clothing immediately and launder thoroughly before reusing.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eyes: Chemical safety goggles recommended.

Skin: Chemical resistant gloves or Nitrile rubber gloves recommended. Respiratory: None required if good ventilation is maintained. If TLV is exceeded, use a NIOSH/MSHA approved respirator. Engineering Controls: Provide adequate ventilation and local exhaust is generally adequate.

Other Protective Clothing or Equipment: Shirts with long sleeves, rubber boots for cleaning up spills.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

 Boiling Point:
 212°F/100°C
 Specific Gravity:
 1.06 (H2O=1)
 Vapor Pressure:
 ~17.5 mmHg
 Melting Point:
 ND

 Vapor Density:
 ND
 Evaporation Rate:
 <1.00 (Butyl Acetate=1)</td>
 Solubility in Water:
 Complete
 pH:
 12.5 - 14

 Appearance and Odor:
 Dark brown liquid with slight vanilla-like odor.
 Dark brown liquid with slight vanilla-like odor.

#### **10. STABILITY AND REACTIVITY**

 Hazardous Polymerization:
 Will not occur.

 Hazardous Decomposition:
 When heated strongly, as in a fire, this product may produce carbon dioxide, carbon monoxide and oxides of phosphorous.

Chemical Stability: Stable

**Incompatibility:** Will react vigorously with strong acids and oxidizers. Will react with active metals (aluminum, zinc, magnesium) liberating hydrogen gas.

#### **11. TOXICOLOGICAL INFORMATION**

#### Carcinogenicity (NTP/IARC/OSHA): None

California Proposition 65: Does this product contain chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm? None

#### **12. ECOLOGICAL INFORMATION**

ND

#### **13. DISPOSAL CONSIDERATIONS**

Consult your local, state, provincial, and federal regulations for proper disposal guidelines. Disposal regulations may be different for each state and/or locality.

#### 14. TRANSPORT INFORMATION

**DOT:** Available upon request **TDG:** Available upon request **UN:** Availabale upon request

#### **15. REGULATORY INFORMATION**

VOC(Volatile Organic Compounds): None TSCA (Toxic Substances Control Act): Listed SARA Title III Section 302 EHS: ND SARA Title III Section 311/312: ND SARA Title III Section 313 Toxic Chemicals: None WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR (Controlled Products Regulations/ WHMIS) and the MSDS contains all the information required by the CPR.

#### **16. OTHER INFORMATION**

Read and follow all label directions and precautions before using this product. These products are intended for industrial and institutional use only. NOT FOR HOUSEHOLD USE OR RESALE. KEEP OUT OF REACH OF CHILDREN.

# UNITED 310 Boiler Treatment for Steam Boilers

REVIEWED BY: Bob Brown