



MATERIAL SAFETY DATA SHEET

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 800-323-2594

1. PRODUCT AND COMPANY IDENTIFICATION

FOR MEDICAL AND TRANSPORTATION EMERGENCIES
 24 Hour INFOTRAC (US and CANADA): 800-535-5053

PRODUCT NAME
 UNITED 817

USE/DESCRIPTION
 ESA Descaler for Steam Boilers

REVISION DATE
 May 17, 2010

HMIS III HEALTH (0 = Maximum Safety) **1**

Always follow Label Directions and Cautions.

* Chronic	2 Moderate
4 Severe	1 Slight
3 Serious	0 Minimal

See Hazards Identification Section of this MSDS for more detailed information.

PHYSICAL HAZARD (0 = Maximum Safety) **0**

Susceptible to Release of Energy.

4 May detonate-vacate area if materials are exposed to fire.	2 Violent chemical change possible-use hose stream from distance
3 Strong shock of heat may detonate-use monitors from behind explosion resistant barriers.	1 Unstable if heated-use precaution.
	0 Normally stable.

FLAMMABILITY (0 = Maximum Safety) **0**

Susceptibility of Material to Burning.

4 Extremely flammable	1 Must be preheated to burn.
3 Ignites at normal temperature.	0 Will not burn.
2 Ignites when moderately heated.	

PERSONAL PROTECTION: n & p



2. COMPOSITION/INFORMATION ON INGREDIENTS

In accordance with Federal Regulation 29 CFR 1910.1200, all materials in this product are considered non-hazardous.

3. HAZARDS IDENTIFICATION

Eyes: Causes burns to eyes.

Skin: Prolonged or repeated contact can cause irritation; non-corrosive to skin.

Inhalation: Not a likely route of exposure due to physical properties. Product may be irritating to the respiratory tract if inhaled as a mist or if the material is vaporized.

Ingestion: This product may be harmful or fatal if ingested.

4. FIRST AID MEASURES

Eyes: Flush with plenty of cool water for at least 15 minutes. Hold eyelids apart to ensure thorough rinsing of the entire surface of the eye and lids with water. Call a physician or poison control center.

Skin: Wash with soap and plenty of water and remove contaminated clothing. If irritation persists, call a physician or poison control center.

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

Ingestion: DO NOT induce vomiting. Call a physician or poison control center immediately. Drink large amounts of water. If vomiting occurs give fluids. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Flash Point (TCC): None

Explosive Limits: Lower (LEL): NA Upper (UEL): NA

Flame Projection (Aerosol): NA

Hazardous Products of Combustion: When strongly heated, as in a fire, this product may react with active metals (e.g. Aluminum, Zinc, etc.) to release flammable hydrogen gas. Thermal decomposition may also product oxides of carbon, nitrogen, and chlorine.

Fire and Explosion Hazards: When strongly heated, as in a fire, this product may react with active metals (e.g. Aluminum, Zinc, etc.) to release flammable hydrogen gas.

Extinguishing Media: Water, Dry chemical, Carbon dioxide, Alcohol foam.

Fire Fighting Instructions: Wear self-contained breathing apparatus w/full protective clothing. Vapors are irritating to the respiratory tract and may cause difficulty breathing and pulmonary edema. Provide for protection of employees and residents.

6. ACCIDENTAL RELEASE MEASURES

Small Spills: Absorb spills with dry sand or earth, then place in chemical waste container for disposal. Neutralize washings with base such as soda ash or lime. Flush residual spill area with large amounts of water. Exercise caution during neutralization as considerable heat may be generated.

Large Spills: Absorb spills with dry sand or earth, then place in chemical waste container for disposal. Neutralize washings with base such as soda ash or lime. Flush residual spill area with large amounts of water. Exercise caution during neutralization as considerable heat may be generated.

7. HANDLING AND STORAGE

When diluting, always add acid slowly to water and stir well to avoid spattering. NEVER ADD WATER TO ACID. Containers should be stored in a cool, dry, well-ventilated area away from incompatible materials. Exercise caution to prevent damage to or leakage from the container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eyes: Safety goggles are recommended.

Skin: Chemical resistant gloves (rubber or Nitrile gloves) are recommended.

Respiratory: Normally not required if good ventilation is maintained. Avoid breathing vapor and/or mist.

Engineering Controls: Normally not required. Provide adequate ventilation and generally local exhaust is adequate.

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: >212°F/100°C **Specific Gravity:** 1.085 (H₂O=1) **Vapor Pressure:** 5.65 (at 68°F) **Melting Point:** -5°F (-17.5°C)
Vapor Density: ND **Evaporation Rate:** ND **Solubility in Water:** Complete **pH:** 1
Appearance and Odor: Red color with little or no odor

10. STABILITY AND REACTIVITY

Hazardous Polymerization: Will not occur.

Hazardous Decomposition: Under fire conditions, product may decompose nitrogen oxide fumes and acid mist.

Chemical Stability: Stable

Incompatibility: This product reacts violently with bases, liberating heat and spattering. Avoid contact with oxidizers. Material may be hazardous in contact with chlorates or nitrates.

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? No

12. ECOLOGICAL INFORMATION

ND

13. DISPOSAL CONSIDERATIONS

Consult your local, state and federal regulations for proper disposal guidelines. Disposal regulations may be different for each state and/or locality. Small amounts (several gallons) may usually be poured down sanitary sewers. This is a non-toxic, biodegradable material.

14. TRANSPORT INFORMATION

DOT: Available upon request

TDG: Available upon request

UN: Available upon request

15. REGULATORY INFORMATION

VOC (Volatile Organic Compounds): None

TSCA (Toxic Substances Control Act): Listed

SARA Title III Section 302 EHS: None

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.