



## MATERIAL SAFETY DATA SHEET

320 37th Avenue, St. Charles, Illinois 60174 • 214 Dolomite Drive, Downsview, Ontario M3J 2N2  
[www.unitedlabsinc.com](http://www.unitedlabsinc.com)

To Reorder Call:  
 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 Canada

#### 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.

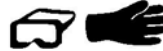
|  |  |
|--|--|
| 4 May detonate-vacate area if materials are exposed to fire.                               | 2 Violent chemical change possible-use hose stream from distance |
| 3 Strong shock of heat may detonate-use monitors from behind explosion resistant barriers. | 1 Unstable if heated-use precaution.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

#### FLAMMABILITY (0 = Maximum Safety) 0

Susceptibility of Material to Burning.

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

PERSONAL PROTECTION: n & p



### 2. COMPOSITION/INFORMATION ON INGREDIENTS

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

Canada:  
 Organic Salt\*\* CAS # 506-89-8 5-30%

**\*\*Potential Health Effects for ingredient above:**

**Eye:** Causes burns to the eyes: Acute eye irritation/corrosion test: This product was found to be Corrosive to the eyes when tested using the Modified draize method (OECD Guidelines for Testing of Chemicals, Sec. 4-5, 1992.)

**Skin:** Prolonged or repeated contact can cause irritation; Non corrosive to Skin: (as defined and tested in accordance with the U.S. OSHA's Hazard Communication Standard, DOT Hazardous Material Regulations, Canada's WHMIS regulations and TDG Regulations. Classified as a mild skin irritant as per the 1992 OECD Guideline for Testing of Chemicals, Number 404 "Acute Dermal Irritation/Corrosion.")

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

**Inhalation:** Not a likely route of exposure due to physical properties. Product has a low vapor pressure at room temperature and is not expected to present a significant inhalation hazard under ambient conditions. Product can be irritating to the respiratory tract if inhaled as a mist or if the material is vaporized.

### 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 is 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 (H<sub>2</sub>O=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.