



## MATERIAL SAFETY DATA SHEET

LABORATORIES

320 37th Avenue • St. Charles, Illinois 60174 • To Reorder, Call 800-323-2594

**PRODUCT IDENTIFICATION**  
UNITED 717

**USE / DESCRIPTION**  
ESA Multi-Purpose  
Industrial Descaler

**REVISION DATE**  
December 30, 2004

**FOR MEDICAL AND TRANSPORTATION EMERGENCIES:**  
INFOTRAC: 800-535-5053

**HEALTH (0 = Maximum Safety)** 1  
Always follow Label Directions and Cautions.  
4 Extreme. 3 High. 2 Moderate. 1 Slight. 0 Minimal.  
**See Health Hazard Data Section of this M.S.D.S. for more detailed information.**

**REACTIVITY (0 = Maximum Safety)** 0  
Susceptible to Release of Energy.  
4 May detonate-vacate area if Materials are exposed to fire.  
3 Strong shock of heat may detonate-use monitors from behind explosion resistant barriers.  
2 Violent chemical change possible-use hose stream from distance  
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**



### HAZARDOUS COMPONENTS IDENTITY, EXPOSURE LIMITS AND S.A.R.A. TITLE III INFORMATION

HAZARDOUS COMPONENTS	CAS NUMBER	ACGIH TWA	ACGIH STEL	OSHA PEL TWA	OTHER RECOMMENDED LIMITS	S.A.R.A. TITLE III QUANTITIES
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In accordance with Federal Regulation 29 CFR 1910.1200, all materials in this product are considered non-hazardous.

This product does not contain materials reportable under SARA Title III Section 313.

This product does not contain materials regulated by California's Proposition 65.

This product is not controlled under Canada's WHMIS.

### PHYSICAL / CHEMICAL CHARACTERISTICS

<b>BOILING POINT</b> Greater than 212°F	<b>SPECIFIC GRAVITY (H:0 = 1)</b> 1.050
<b>VAPOR PRESSURE (mm Hg.)</b> (At 68° F.) 5.65	<b>MELTING POINT</b> -5°F (-17.5°C)
<b>VAPOR DENSITY (Air = 1)</b> Not determined	<b>EVAPORATION RATE</b> (Butyl Acetate = 1) Not determined
<b>SOLUBILITY IN WATER</b> Complete	<b>VOLATILE ORGANIC COMPOUNDS (V.O.C.)</b> (Pounds Per Gallon Of Product) None
<b>APPEARANCE AND ODOR</b> Yellow color with little or no odor	<b>pH:</b> 1

### FIRE AND EXPLOSION HAZARD DATA

<b>FLASH POINT (Method Used)</b> None (Tag Closed Cup)	<b>FLAMMABLE LIMITS</b> Not applicable	<b>LEL</b> Not applicable	<b>UEL</b> Not applicable
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**EXTINGUISHING MEDIA**  
Water, dry chemical, CO<sub>2</sub>, Alcohol foam

**SPECIAL FIRE FIGHTING PROCEDURES**  
Vapors are irritating to the respiratory tract and may cause difficulty breathing and pulmonary edema. Provide for protection of employees and residents.

Firefighters should wear self-contained breathing apparatus and protective clothing.

**UNUSUAL FIRE AND EXPLOSION HAZARDS**

In the presence of extreme heat (as in a fire) product may react with active metals (e.g. Aluminum, Zinc, etc.) to release flammable hydrogen gas.

Thermal decomposition may also produce oxides of carbon, nitrogen, and chlorine.

## REACTIVITY DATA

**STABILITY:**STABLE   
UNSTABLE **CONDITIONS TO AVOID**

None known

**INCOMPATIBILITY (Materials To Avoid)**

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

**HAZARDOUS DECOMPOSITION OR BY PRODUCTS**

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

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR   
MAY OCCUR **CONDITIONS TO AVOID**

None known

## HEALTH HAZARD DATA

**HEALTH HAZARDS**

EYES: Causes burns to eyes. SKIN: Prolonged or repeated contact can cause irritation.

INHALATION: Mists of this product are irritating to the respiratory tract. IF SWALLOWED: The product may be harmful or fatal if ingested.

**CARCINOGENICITY:**

NTP? No

IARC MONOGRAPHS? No

OSHA REGULATED? No

This product contains a chemical known to the state of California to cause cancer or reproductive toxicity? No

**SIGNS AND SYMPTOMS OF OVEREXPOSURE**

EYES: Causes burns to the eyes. SKIN: Prolonged or repeated contact may cause irritation.

INHALATION: Mists of this product are irritating to the respiratory tract. IF SWALLOWED: The product may be harmful or fatal if ingested.

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY OVEREXPOSURE**

Skin irritation may be aggravated in persons with existing skin lesions. Breathing of mists may aggravate acute or chronic asthma or other respiratory disease.

**TARGET ORGANS:**

Skin, eyes, respiratory system

**EMERGENCY AND FIRST AID PROCEDURES**

EYES: Flush with 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 immediately. SKIN: Wash with soap and 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 immediately. IF SWALLOWED: DO NOT INDUCE VOMITING. Call a physician or poison control center immediately.

Drink 3-4 glasses of water. If vomiting occurs, give fluids. Never give anything by mouth to an unconscious person.

## PRECAUTIONS FOR SAFE HANDLING AND USE

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED**

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.

**WASTE DISPOSAL METHOD**

Consult local, state or federal authorities for proper disposal guidelines.

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING**

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.

## CONTROL MEASURES

### FOR USE WHERE SIGNIFICANT EYE, SKIN OR INHALATION EXPOSURE IS LIKELY

**RESPIRATORY PROTECTION (Specify Type)**

Not normally required if good ventilation is maintained. Avoid breathing vapor and/or mist.

VENTILATION: MECHANICAL (General)

Provide adequate ventilation

LOCAL EXHAUST

Generally adequate

**PROTECTIVE GLOVES**

Rubber or nitrile gloves

**EYE PROTECTION**

Safety goggles

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT**

Shirts with long sleeves are recommended.

**WORK HYGENIC PRACTICES**

Remove contaminated clothing immediately and wash with soap and water before reusing. Wash hands and face with soap and water after using this product.