

JUN 13 1994

UNITED 18

# UNITED MATERIAL SAFETY DATA SHEET

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

PRODUCT IDENTIFICATION  
UNITED 18

USE / DESCRIPTION  
SAFETY DESCALER

DATE OF MOST RECENT REVISION  
March 22, 1993

EMERGENCY TELEPHONE NUMBER  
CHEMTREC: 800-424-9300  
UNITED: 800-323-2594

## HEALTH (0 = Maximum Safety)

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.

2

## REACTIVITY (0 = Maximum Safety)

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.

0

## FLAMMABILITY (0 = Maximum Safety)

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.

0

## 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	OTHER RECOMMENDED LIMITS	S.A.R.A. TITLE III QUANTITIES
Hydrogen Chloride	7647-01-0	Ceiling: 5 ppm Ceiling: 7.5 mg/m <sup>3</sup>	Not established	Ceiling: 5 ppm Ceiling: 7.5 mg/m <sup>3</sup>	None	0.70*

\* Pounds of reportable material per gallon of UNITED product.

## PHYSICAL / CHEMICAL CHARACTERISTICS

### BOILING POINT

Approximately 212°F.

### SPECIFIC GRAVITY (H<sub>2</sub>O = 1)

1.055

### VAPOR PRESSURE (mm Hg.)

(At 77° F.) Not determined.

### MELTING POINT

Not determined.

### VAPOR DENSITY (Air = 1)

Greater than 1.0

### EVAPORATION RATE

(Butyl Acetate = 1) Not determined.

### SOLUBILITY IN WATER

Complete.

### VOLATILE ORGANIC COMPOUNDS (V.O.C.)

(Pounds Per Gallon Of Product) None.

### APPEARANCE AND ODOR

Clear pink liquid with hydrogen chloride odor.

### pH:

1.0

## FIRE AND EXPLOSION HAZARD DATA

### FLASH POINT (Method Used)

None (Tag closed cup)

### FLAMMABLE LIMITS

None

### LEL

—

### UEL

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### EXTINGUISHING MEDIA

Water, dry foam, carbon dioxide.

### SPECIAL FIRE FIGHTING PROCEDURES

Use water, mist or spray to keep containers cool. Plastic shipping containers may burn, although product will not.

### UNUSUAL FIRE AND EXPLOSION HAZARDS

Heating may cause release of hazardous fumes. Use self-contained breathing apparatus.

## REACTIVITY DATA

STABILITY:                      STABLE   
   UNSTABLE                       CONDITIONS TO AVOID  
      None known.

### INCOMPATIBILITY (Materials To Avoid)

Do not mix with other chemicals, cleaners, strong alkalis or bleach.

### HAZARDOUS DECOMPOSITION OR BYPRODUCTS

May produce hydrogen chloride gas, if heated.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR   
   MAY OCCUR                       CONDITIONS TO AVOID  
      None known.

## HEALTH HAZARD DATA

### HEALTH HAZARDS

May cause severe eye and skin irritation and burns. May cause burns in mouth, throat and stomach if swallowed. Avoid inhaling fumes.

CARCINOGENICITY:                      NTP?                      IARC MONOGRAPHS?                      OSHA REGULATED?  
   No.                      No.                      No.

### SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES AND SKIN: May cause severe eye and skin irritation and burns. IF INHALED: May cause irritation of eyes, nose and throat.

IF SWALLOWED: may be harmful or fatal.

### MEDICAL CONDITIONS GENERALLY AGGRAVATED BY OVEREXPOSURE

None known.

### EMERGENCY AND FIRST AID PROCEDURES

SKIN AND EYES: Flush with plenty of water for at least 15 minutes. Call a physician or poison center. IF INHALED: Get patient to fresh air immediately; apply CPR if needed.

Call a physician or poison center immediately. IF SWALLOWED: Do not induce vomiting. Drink cold water or milk to dilute; followed by lime water, milk of magnesia,

or other antacid. Do not give carbonate or bicarbonates. Call a physician or poison center immediately.

## PRECAUTIONS FOR SAFE HANDLING AND USE

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

Spills of up to one gallon should be diluted with plenty of water and flushed into the sewer.

### WASTE DISPOSAL METHOD

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

### PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Keep containers tightly closed; store in a cool, dry place. Do not let containers freeze, as they may split or rupture.

## CONTROL MEASURES

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

#### RESPIRATORY PROTECTION (Specify Type)

Avoid breathing fumes—use a NIOSH-approved respirator with an acid cartridge, if needed.

VENTILATION:    MECHANICAL (General)                      LOCAL EXHAUST  
   Low power exhaust fans are recommended.                      Generally adequate.

#### PROTECTIVE GLOVES

Rubber gloves (such as UNITED A392) recommended.

#### EYE PROTECTION

Chemical, goggles (such as UNITED A393) recommended.

#### OTHER PROTECTIVE CLOTHING OR EQUIPMENT

Long sleeves are recommended.

#### WORK HYGIENIC 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.