

2-4-06

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
ACIDEX DESCALER

USE / DESCRIPTION
Descaler

REVISION DATE
February 26, 2004

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

HEALTH (0 = Maximum Safety)

2

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	OTHER RECOMMENDED LIMITS	S.A.R.A. TITLE III QUANTITIES
Hydrochloric acid	7647-01-0	Not established	C: 5 ppm C: 7.5 mg/m ³	STEL C: 5 ppm C: 7.5 mg/m ³	NIOSH STEL C: 5 ppm C: 7 mg/m ³	0.78*
Nonylphenol ethoxylate	9016-45-9	Not established	Not established	Not established	Not established	None

* Pounds of reportable material per gallon of UNITED product.

PHYSICAL / CHEMICAL CHARACTERISTICS

BOILING POINT Approximately 183°F.	SPECIFIC GRAVITY (H₂O = 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 (Water = 1) Greater than 1.0
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 —
EXTINGUISHING MEDIA Water spray, dry chemical, CO ₂ , alcohol foam			
SPECIAL FIRE FIGHTING PROCEDURES Firefighters should wear full protective equipment and NIOSH-approved self-contained breathing apparatus. Use water spray to cool fire exposed containers.			

UNUSUAL FIRE AND EXPLOSION HAZARDS
Heating may cause release of hazardous fumes. May generate flammable, potentially explosive hydrogen gas on contact with some metals.
Explosive levels of hydrogen may accumulate inside metal equipment. Follow appropriate NFPA codes.

REACTIVITY DATA

STABILITY:

STABLE
UNSTABLE

CONDITIONS TO AVOID
None known

INCOMPATIBILITY (Materials To Avoid)

Do not mix this product with other cleaning chemicals, especially strong bases, metal oxides, or oxidizers (like bleach).

HAZARDOUS DECOMPOSITION OR BYPRODUCTS

Heat can cause evolution of gaseous hydrogen chloride, CO, CO₂ and miscellaneous organic compounds.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR
MAY OCCUR

CONDITIONS TO AVOID
None known

HEALTH HAZARD DATA

HEALTH HAZARDS

EYES: Causes severe burns and destruction of tissues. Small quantities can result in permanent damage and loss of vision. SKIN: May cause severe burns.

INHALATION: Vapors or mist may cause irritation to the throat, mucous membranes and upper respiratory tract. May cause damage to the lung tissue depending

upon the extent of exposure. IF SWALLOWED: Can cause very serious damage to the mouth, esophagus, stomach and other contacted tissues and may be fatal.

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: Pain, tearing, redness and swelling SKIN: Redness and swelling INHALATION: Irritation to the throat, mucous membranes and upper respiratory tract

IF SWALLOWED: Severe irritation and injury characterized by pain in the mouth, throat and stomach, difficulty in swallowing, nausea and vomiting followed by

diarrhea and respiratory distress.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY OVEREXPOSURE

Individuals with pre-existing disease of the lungs may have increased susceptibility to the toxicity of excessive exposures.

TARGET ORGANS

Eyes, skin, respiratory system

EMERGENCY AND FIRST AID PROCEDURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Hold eyelids open during flushing. Call a physician or poison center immediately. SKIN: Immediately flush with

plenty of water for at least 15 minutes. Call a physician or poison center immediately. INHALATION: Remove victim to fresh air. If not breathing give artificial respiration. If breathing is difficult,

give oxygen. Call a physician or poison center. IF SWALLOWED: DO NOT induce vomiting. If conscious, drink several glasses of water. Call a physician or poison center immediately.

PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Wear appropriate personal protective equipment. Contain spill and place into container for proper disposal. Flush remaining area with water and neutralize with soda ash

or lime. Maintain adequate ventilation.

WASTE DISPOSAL METHOD

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

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Keep containers tightly closed and store in a cool, dry place. Do not let containers freeze, as they may split or rupture. Do not get in eyes, on skin

or clothing. Avoid breathing vapors or mists.

CONTROL MEASURES

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

RESPIRATORY PROTECTION (Specify Type)

If TLV is exceeded, use a NIOSH/MSHA-approved self-contained breathing apparatus.

VENTILATION: MECHANICAL (General)

Provide adequate ventilation

LOCAL EXHAUST

Generally adequate

PROTECTIVE GLOVES

Rubber gloves

EYE PROTECTION

Safety goggles

OTHER PROTECTIVE CLOTHING OR EQUIPMENT

Long sleeves and chemical resistant apron 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.