



MATERIAL SAFETY DATA SHEET

LABORATORIES

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

PRODUCT IDENTIFICATION
UNITED 670
ELECTRA-ZYME

USE / DESCRIPTION
Water Based Printed
Circuit Board Cleaner

REVISION DATE
April 1, 1997

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

HEALTH (0 = Maximum Safety) **0**
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.
- 3 Ignites at normal temperature.
- 2 Ignites when moderately heated.
- 1 Must be preheated to burn.
- 0 Will not burn.

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
----------------------	------------	-----------	------------	----------	--------------------------	-------------------------------

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.

PHYSICAL / CHEMICAL CHARACTERISTICS

BOILING POINT 212° F.	SPECIFIC GRAVITY (H:0 = 1) 1.00
VAPOR PRESSURE (mm Hg.) (At 77° F.) Approximately 17.5 mmHg	MELTING POINT Not determined.
VAPOR DENSITY (Air = 1) Not determined.	EVAPORATION RATE (Water = 1) Approximately 1.0.
SOLUBILITY IN WATER 100% soluble.	VOLATILE ORGANIC COMPOUNDS (V.O.C.) (Pounds Per Gallon Of Product) None.
APPEARANCE AND ODOR Light green color with light cimarron (cinnamon-like) scent.	pH: 7 - 8

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method Used) Greater than 200° F (Tag Closed Cup).	FLAMMABLE LIMITS	LEL None.	UEL None.
---	-------------------------	---------------------	---------------------

EXTINGUISHING MEDIA
Dry chemical, dry foam, carbon dioxide, or water may be used.

SPECIAL FIRE FIGHTING PROCEDURES
Self-contained positive pressure breathing apparatus and protective clothing should be worn in fighting fires involving chemicals.

UNUSUAL FIRE AND EXPLOSION HAZARDS
None known.

REACTIVITY DATA

STABILITY:STABLE
UNSTABLE **CONDITIONS TO AVOID**

None known.

INCOMPATIBILITY (Materials To Avoid)

Strong oxidizing agents.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS

Nitrous oxides and ammoniacal vapors.

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

None known.

HEALTH HAZARD DATA

HEALTH HAZARDS

EYES: May cause irritation. SKIN: Prolonged or repeated contact may cause irritation. INHALATION: Mists of this product may irritate nasal passages.

IF SWALLOWED: Swallowing large amounts (more than a few ounces) may cause nausea, upset stomach and vomiting.

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 AND SKIN: May cause irritation or rash after prolonged contact. INHALATION: Coughing and irritation of nasal passages.

IF SWALLOWED: Nausea, upset stomach and vomiting.

TARGET ORGANS:

Skin.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY OVEREXPOSURE

Pre-existing skin disorders and acute or chronic asthma.

EMERGENCY AND FIRST AID PROCEDURES

EYES: Flush with cool water for at least 15 minutes and call a physician or poison center. SKIN: Wash with soap and water. If irritation persists, call a physician or poison center.

IF SWALLOWED: Induce vomiting only under the direction of a physician. Never give anything by mouth to an unconscious person.

Call a physician or poison center immediately. IF MIST IS INHALED: Remove patient to fresh air. If irritation persists call a physician or poison center.

PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

If this material is released or spilled, flush it with water to the nearest sewer to drain. This product, when spilled on the floor, may also cause slippery conditions.

Remove with a wet vac or scrub area with scrubber or floor machine if available.

WASTE DISPOSAL METHOD

Consult your local, state and federal officials for proper disposal guidelines. Small amounts (several gallons) may usually be poured down sanitary sewers.

This is a non-toxic, biodegradable material.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Keep this product in a properly labeled, tightly closed container. Do not allow this product to freeze. Keep out of reach of children.

CONTROL MEASURES

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

RESPIRATORY PROTECTION (Specify Type)

Not normally required.

VENTILATION: MECHANICAL (General)

Not normally required.

LOCAL EXHAUST

Normal ventilation is usually adequate.

PROTECTIVE GLOVES

Recommended only for prolonged or repeated exposure to the concentrated product.

EYE PROTECTION

Safety glasses are suggested when handling the concentrated product.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT

Shirts with long sleeves are recommended.

WORK HYGENIC PRACTICES

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