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Date: 11/26/85

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### MATERIAL SAFETY DATA SHEET

### SECTION I

### SECTION 11 HAZARDOUS INGREDIENTS OF MIXTURES

Principal Hazardous Components (%): tert-Butyl alcohol 71%, Hydrochloric acid 24% TLV (Units): LDLo 500mg/Kg; tert-Butyl alcohol Oral Rat LD50 3500mg/Kg, 100ppm; Hydrochloric acid ihl-hmn LCLo 1000ppm/1M, 5ppm.

#### SECTION III PHYSICAL DATA

Boiling Point (F.): no information
Vapor Pressure (mm Hg.): no information
Vapor Density (Air=1): no information
Specific Gravity (H20=1): no information
Percent Volatile By Volume (%): 95%
Evaporation Rate ( =1): no information
Solubility in Water: slight
Appearance and Odor:Clear liquid with alcoholic odor.

# SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used):10C (TCC) (tert-butyl alcohol)
Extinguisher Media:Alcohol foam, dry chemical, carbon dioxide.
Flammable Limits in Air % by Vol.: 2.4 - 8 (tert-butyl alcohol)
Autoignition Temperature: 892 F (tert-butyl alcohol)
Special Fire Fighting Procedures:Respiratory protection required if in confined space.
Unusual Fire and Explosion Hazards:Dangerous when exposed to heat or flame; can react with oxidizing materials.

### SECTION VI HEALTH HAZARD DATA

Threshold Limit Value: See Section II

Effects of Over exposure: Causes burns. Corrosive by liquid or fume contact. Irritant to respiratory passages. Vapor is narcotic in action. Inhalation may cause severe pulmonary edema.

Acute Overexposure: no information Chronic Overexposure: no information Emergency and First Aid Procedures: Get immediate medical attention for all cases of overexposure.

Inhalation: Remove to fresh air. Give artificial as required. Consult a physician.

Eyes: Flush thoroughly with water for at least 15 minutes holding lids apart. Consult a physician,

Skin: Flush thoroughly with water for at least 15 minutes. Consult a physician.

Ingestion:Do NOT induce vomiting; drink milk or water if conscious. Consult a physician.

### SECTION VI REACTIVITY DATA

Stabilitiy: stable

Conditions to Avoid: Heat, sparks, and open flame. Incompatibility (Materials to Avoid): Oxidizers, alkalies, metals, metal oxides, amines, carbonates Hazardous Decomposition Products:toxic hydrogen chloride gas Hazardous Polymerization: will not occur Conditions to Avoid:

## SECTION VII SPILL OR LEAK PROCEDURES

Steps to Be Taken In Case Material is Released or Spilled: Eliminate all sources of ignition. Cover the spill with vermiculite or another absorbent. then sprinkle a soda ash/slaked mixture, or another suitable neutralizer, over the spill to neutralize it. When neutralized and sufficiently absorbed, scoop into plastic bags and dispose of properly. Waste Disposal Method: Incinerate in accordance with Federal, State and local regulations.

# SECTION VIII SPECIAL PROTECTION INFORMATION

Respiratory Protection (Specify Type): Fume hood, face shield Ventilation:

Local Exhaust:X Mechanical (general): Special: Other:

Protective Gloves:Protective gloves Eye Protection:splash-proof, vapor-proof goggles, do not wear contact Other Protective Clothing or Equipment:Lab coat/apron, eye wash, safety shower

#### SECTION IX SPECIAL PRECAUTIONS

Precautions To Be Taken In Handling And Storing: Store in a moderate temperature (material may freeze below 77F), well-ventilated area separated from incompatible materials. Keep container closed when not

Other Precautions: no information

Date Issued: /1/27/85

Approved by: May ann Joust

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