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#### MATERIAL SAFETY DATA SHEET

### SECTION I

Product Name: Kovac Solution Size:100ml, 500ml Chemical name: none Formula:p-Dimethylaminobenzaldehyde..50 tert-Butyl alcohol...........75.0ml Hydrochloric acid......25.0ml Manufacturer: Carolina Biological Supply Company

Address: 2700 York Road

Burlington, NC 27215 For Information on Health Hazards Call: For Other Information Call: 919-584-0381 Date: 11/26/85

# SECTION II 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

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

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

Exes: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:

and local regulations.

### 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

### SECTION VIII SPECIAL PROTECTION INFORMATION

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

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

Protective Gloves:Protective gloves

Eye Protection:splash-proof, vapor-proof goggles, do not wear contact lenses

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 in use.

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Other Precautions: no information

Date Issued: /1/27/85

Approved by:

Other:

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