



KOVAC SOLUTION

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Carolina Biological Supply Company

2700 York Rd | Burlington, NC 27215 • to order: 800.334.5551 • for support: 800.227.1150

CAROLINA
www.carolina.com

Section 1 - Product Description

Product Name: Kovac Solution
Product Code(s): 87-1391, 87-1393, 87-1389
Size: 100 mL, 500 mL, 30 mL
Chemical Name: N/A
CAS Number: N/A
Formula: N/A
Synonyms: N/A
Distributor: Carolina Biological Supply Company, 2700 York Road, Burlington, NC 27215
Chemical Information: 800-227-1150 (8am-5pm (ET) M-F) **Chemtrec** 800-424-9300 (Transportation Spill Response 24 hours)

Section 2 - Composition / Information on Ingredients

Principal Hazardous Components: tert-Butyl Alcohol (CAS# 75-65-0) 71%; p-Dimethylaminobenzaldehyde (CAS# 100-10-7) 5%; Hydrochloric acid (CAS# 7647-01-0) 24%
TLV units: tert-Butyl Alcohol: ACGIH-TLV 100 ppm (TWA)
Hydrochloric acid: ACGIH-TLV 2 ppm; Ceiling
PEL units: tert-Butyl Alcohol: OSHA-PEL 100 ppm (TWA)
Hydrochloric acid: OSHA-PEL 5 ppm; Ceiling

Section 3 - Hazard Identification

Emergency Overview: May cause damage to kidneys, liver, & blood. Vapours may cause drowsiness and dizziness. Causes burns. Harmful by inhalation and if swallowed.

Potential Health Effects:

Eyes: May cause irritation.

Skin: May cause irritation to skin.

Ingestion: May cause gastrointestinal discomfort.

Inhalation: May cause irritation to respiratory tract.

Section 4 - First Aid Measures

Emergency and First Aid Procedures:

Eyes - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Skin - After contact with skin, wash immediately with plenty of ... (Water, unless specified as water-reactive).

Ingestion - If swallowed, rinse mouth with water (only if the person is conscious). If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.

Inhalation - In case of accident by inhalation: remove casualty to fresh air and keep at rest.

Section 5 - Firefighting Procedures

Flash Point (Method Used): 10.9°C (cc) (tert-Butyl Alcohol)

NFPA Rating:

Health: 3

Fire: 3

Reactivity: 2

Extinguisher Media: Use dry chemical, CO₂ or appropriate foam.

Flammable Limits in Air % by Volume: LEL 2.4% (tert-Butyl Alcohol) UEL 8% (tert-Butyl Alcohol)

Autoignition Temperature: 479.9°C (tert-Butyl Alcohol)

Special Firefighting Procedures: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: Contact with strong oxidizers may cause fire or explosion.
Highly flammable.

Section 6 - Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled: Ventilate area of spill. Eliminate all sources of ignition. Remove all non-essential personnel from area. Clean-up personnel should wear proper protective equipment and clothing. Absorb material with suitable absorbent and containerize for disposal.

Section 7 - Special Precautions

Precautions to Take in Handling or Storing: Keep away from oxidizing materials and strong acids.

Keep away from sources of ignition - No smoking.

Harmful if swallowed.

After contact with skin, wash immediately with plenty of ... (Water, unless specified as water-reactive).

Do not breathe dust/vapor. Do not get in eyes, on skin, or on clothing. Retained residue may make empty containers hazardous; use caution.

Bond and ground containers when transferring liquid.

Keep container tightly closed in a cool, well-ventilated place. This material should be kept in an area suitable for the storage of flammable liquids.

Section 8 - Protection Information

Respiratory Protection (Specify Type): None needed under normal conditions of use with adequate ventilation. A NIOSH/MSHA chemical cartridge respirator should be worn if PEL or TLV is exceeded.

Ventilation:

Local Exhaust: Preferred

Mechanical(General): Acceptable

Special: No

Other: No

Protective Gloves: Natural rubber, Neoprene, PVC or equivalent.

Eye Protection: Splash proof chemical safety goggles should be worn.

Other Protective Clothing or Equipment: Lab coat, apron, eye wash, safety shower.

Section 9 - Physical Data

Molecular Weight: N/A

Boiling Point: N/A

Vapor Density(Air=1): N/A

Percent Volatile by Volume: 95%

Solubility in Water: Slightly Soluble

Melting Point: N/A

Vapor Pressure: N/A

Specific Gravity (H₂O=1): N/A

Evaporation Rate (BuAc=1): N/A

Appearance and Odor: Clear, colorless liquid, Alcohol odor.

Section 10 - Reactivity Data

Stability: Stable

Conditions to Avoid: Heat and sources of ignition.

Incompatibility (Materials to Avoid): Carbonates, Amines, Metal Oxides, Metals, Alkalies, Oxidizers,

Hazardous Decomposition Products: HCl,

Hazardous Polymerization: Will not occur

Section 11 - Toxicity Data

Toxicity Data: tert-Butyl Alcohol: ivn-mus LD50 1500 mg/kg; orl-rat LD50 2743 mg/kg.

Hydrochloric acid: ihl-rat LC50 3124 ppm/1H; orl-rbt LD50 900 mg/kg.

p-Dimethylaminobenzaldehyde: ipr-rat LD50 620 mg/kg; orl-rat LDlo 500 mg/kg.

Effects of Overexposure:

Acute: See section 3

Chronic: Not listed as a carcinogen by IARC, NTP or OSHA. Reproductive data cited. Mutation data cited.

Conditions Aggravated by Overexposure: N/A

Target Organs: N/A

Primary Route(s) of Entry: Inhalation.

Section 12 - Ecological Data

EPA Waste Numbers: Hydrochloric acid D002, tert-Butyl Alcohol D001

Section 13 - Disposal Information

Waste Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.

Section 14 - Transport Information

DOT Proper Shipping Name: UN2924, Description: Flammable Liquids, corrosive, N.O.S. (tert-butyl alcohol, Hydrochloric Acid), 3, II.

Section 15 - Regulatory Information

EPA TSCA Status: On TSCA Inventory

Hazard Category for SARA Section 311/312 Reporting: Acute

Name List:

tert-Butyl Alcohol - Yes

Hydrochloric acid - Yes

p-Dimethylamino-benzaldehyde - No

Chemical Category:

tert-Butyl Alcohol - No

Hydrochloric acid - No

p-Dimethylamino-benzaldehyde - No

CERCLA Section 103 RQ(lb.): tert-Butyl Alcohol - No

Hydrochloric acid - 5000

p-Dimethylamino-benzaldehyde - No

RCRA Section 261.33: tert-Butyl Alcohol - No

Hydrochloric acid - No

p-Dimethylamino-benzaldehyde - No

Section 16 - Additional Information

The information provided in this Material Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the Material Safety Data Sheet. Any employer must carefully assess the applicability of any information contained herein in regards to the particular use to which the employer puts the material.

Glossary

ACGIH	American Conference of Governmental Industrial Hygienists
CAS Number	Chemical Services Abstract Number
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DOT	U.S. Department of Transportation
IARC	International Agency of Research on Cancer
N/A	Not Available
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
ppm	Parts per million
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act