

MATERIAL SAFETY DATA SHEET

KOVAC SOLUTION
CAROLINA BIOLOGICAL

Revised: 05/15/08
Replaces: 07/10/07
Printed: 05/20/08

1. PRODUCT DESCRIPTION

Product Name: Kovac Solution
Product Code(s): 87-1391, 87-1393, 87-1389
Size: 100 mL, 500 mL, 30mL
Chemical Name: Does not apply, product is a mixture.
CAS Number: None assigned
Formula: N/A
Synonyms: None Known
Distributor: Carolina Biological Supply Company
2700 York Road
Burlington, NC 27215

Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec (Transportation Spill Response 24 hours): 800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

Principal Hazardous Components:

Hydrochloric acid (CAS# 7647-01-0) 24%
p-Dimethylaminobenzaldehyde (CAS# 100-10-7) 5%
tert-Butyl Alcohol (CAS# 75-65-0) 71%

TLV and PEL units: Hydrochloric acid: ACGIH-TLV 2 ppm; Ceiling
OSHA-PEL 5 ppm; Ceiling
tert-Butyl Alcohol: ACGIH-TLV 100 ppm (TWA);
OSHA-PEL 100 ppm (TWA)

3. HAZARD IDENTIFICATION

Emergency Overview: DO NOT INGEST ! Causes burns. Corrosive by liquid or fume contact. Vapor is narcotic in action. Inhalation may cause kidney and liver damage.

Potential Health Effects:

Eyes: May cause irritation.

Skin: May cause irritation.

Ingestion: May cause gastrointestinal discomfort.

Inhalation: May cause irritation to respiratory tract.

4. FIRST AID MEASURES

Emergency and First Aid Procedures:

Eyes - Flush with water for at least 15 minutes, raising and lowering eyelids occasionally. Get medical attention if irritation persists.

Skin - Thoroughly wash exposed area for at least 15 minutes. Remove contaminated clothing. Launder contaminated clothing before reuse. Get medical attention if irritation persists.

Ingestion - Do not induce vomiting. If swallowed, if conscious, give plenty of water immediately and call a physician or poison control center. Never give anything by mouth to an unconscious person.

Inhalation - Remove to fresh air. Give oxygen if breathing is difficult; give artificial respiration if breathing has stopped. Keep person warm, quiet, and get medical attention.

5. FIREFIGHTING PROCEDURES

Flash Point(Method Used): 52F (cc) (tert-Butyl Alcohol)

NFPA Rating: Health: 2

Fire: 3

Reactivity: 0

Extinguisher Media:

Use dry chemical, CO2 or appropriate foam.

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

Autoignition Temperature: 892 F (tert-Butyl Alcohol)

Special Firefighting Procedures:

Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: Dangerous when exposed to heat or flame; can react with oxidizing materials.

6. SPILL OR LEAK PROCEDURES

Steps to be Taken 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.

7. SPECIAL PRECAUTIONS

Precautions to be Taken in Handling or Storing: Store in an area suitable for flammable materials. Bond and ground containers when transferring liquid. Store away from ignition sources and oxidizers. Retained residue may make empty containers hazardous: use caution ! Do not breathe vapor. Do not get in eyes, on skin, or on clothing. Other Precautions: Wash thoroughly after handling. Do not take internally.

8. SPECIAL PROTECTION INFORMATION

Respiratory Protection(Specify Type):

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:

Rubber, neoprene, PVC, or equivalent.

Eye Protection:

Splash proof chemical safety goggles should be worn at all times.

Other Protective Clothing or Equipment:

Lab apron, eye wash, and safety shower.

9. PHYSICAL DATA

Molecular Weight: No data available

Melting Point: No data available

Boiling Point: No data available

Vapor Pressure: No data available

Vapor Density(Air=1): No data available

Specific Gravity(H₂O=1): No data available

Percent Volatile by Volume: 95%

Evaporation Rate(H₂O=1): No data available

Solubility in Water: Slight

Appearance and Odor: Clear liquid with alcoholic odor.

10. REACTIVITY DATA

Stability: Stable

Conditions to Avoid: Heat, sparks, and open flames.

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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 Abstracts Service Number
CERCLA.....Comprehensive Environmental Response, Compensation, and Liability Act
DOT.....U.S. Department of Transportation
IARC.....International Agency of Research on Cancer
mppcf.....million particles per cubic foot
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