

Material Safety Data Sheet



Acid Dichromate 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
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Section 1 - Product Description

Product Name: Acid Dichromate Solution

Product Code(s): 84-1953, 69-9772

Size: Various

Chemical Name: N/A

CAS Number: N/A

Formula: N/A

Synonyms: Alcohol Indicator Reagent

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 - Hazard Identification

Emergency Overview: May be fatal if swallowed or inhaled.

Potential Health Effects:

Eyes: Causes severe burns and eye damage upon direct contact. Vapor is irritating.

Skin: May cause severe irritation or chemical burns.

Ingestion: May severely irritate or damage digestive tract.

Inhalation: May severely irritate or damage mucous membranes and respiratory tract.

Section 3 - Composition / Information on Ingredients

Principal Hazardous Components: Sulfuric Acid (CAS# 7664-93-9) 49.7%

Potassium Dichromate (CAS# 7778-50-9) 0.49%

Silver Nitrate (CAS# 7761-88-8) 0.09%

TLV units: Sulfuric Acid: ACGIH-TLV: 0.2 mg/m³ TWA (thoracic fraction)

Potassium Dichromate: ACGIH-TLV: 0.05 mg/m³ TWA (as chromium)

Silver Nitrate: ACGIH-TLV: 0.01 mg/m³ TWA (as Silver)

PEL units: Sulfuric Acid: OSHA-PEL: 1mg/m³ TWA

Potassium Dichromate: OSHA-PEL: 0.1 mg/m³ Ceiling (as CrO₃)

Silver Nitrate: OSHA-PEL: 0.01 mg/m³ TWA (as Silver)

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, take off immediately all contaminated clothing, and wash immediately with plenty of water.

Ingestion - 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): N/A

NFPA Rating:

Health: 3

Fire: 0

Reactivity: 2

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

Flammable Limits in Air % by Volume: N/A N/A

Autoignition Temperature: N/A

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

Unusual Fire and Explosion Hazards: Non-combustible but contact with water or moisture may generate sufficient heat to ignite combustible materials

Contact with combustible materials, flammable materials, or powdered metals can cause fire or explosion. Can react violently with reducing agents.

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: Retained residue may make empty containers hazardous. Keep container tightly closed in a cool, well-ventilated place.

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: Yes

Mechanical(General): Yes

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: Approx. 98%

Solubility in Water: Soluble

Melting Point: N/A

Vapor Pressure: N/A

Specific Gravity (H2O=1): Approx. 2.8

Evaporation Rate (BuAc=1): < 1

Appearance and Odor: Yellow to brown liquid; slight sweet

odor.

Section 10 - Reactivity Data

Stability: Stable

Conditions to Avoid: Shock, contact with reducing materials

Heat and sources of ignition.

Incompatibility (Materials to Avoid): Organics, Nitrates, Metal carbides, Water,

Hazardous Decomposition Products: Chromium compounds, SO_x,

Hazardous Polymerization: Will not occur

Section 11 - Toxicity Data

Toxicity Data: Sulfuric Acid: orl-rat LD50: 2140 mg/kg

Potassium dichromate: orl-rat LD50: 25 mg/kg

Silver Nitrate: orl-rat LD50: 1173 mg/kg

Effects of Overexposure:

Acute: See Section 2

Chronic: Mutation data cited.

Conditions Aggravated by Overexposure: Respiratory disorders, Eye disorders, Skin disorders,

Target Organs: Eyes, Skin, Respiratory system,

Primary Route(s) of Entry: Ingestion, Skin contact.

Section 12 - Ecological Data

EPA Waste Numbers: For individual components:

Sodium dichromate: D001, D007

Sulfuric acid: D002, D003

Silver nitrate: listed as silver compounds

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: UN3093, Corrosive liquids, oxidizing, n.o.s. (contains sulfuric acid, potassium dichromate), 8, II

Label(s) required: CORROSIVE, OXIDIZER

Section 15 - Regulatory Information

EPA TSCA Status: On TSCA Inventory

Hazard Category for SARA Section 311/312 Reporting: Acute

Name List:

Potassium Dichromate: No

Sulfuric Acid: Yes

Silver Nitrate: No

Chemical Category:

CERCLA Section 103 RQ(lb.): Potassium Dichromate: 10 lbs

Sulfuric Acid: 1000 lbs

Silver Nitrate: 1 lb

RCRA Section 261.33: Potassium Dichromate: No

Sulfuric Acid: No

Silver Nitrate: 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