

MATERIAL SAFETY DATA SHEET

SCHIFF REAGENT
CAROLINA BIOLOGICAL

Revised: 16/07/04
Replaces: 09/05/00
Printed: 18/08/08

1. PRODUCT DESCRIPTION

Product Name: Schiff Reagent
Product Code(s): 88-7263
Size: 500 mL
Chemical Name: None
CAS Number: See section 2
Formula: see section 2
Synonyms: None
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

Principle Hazardous Components:
Basic Fuchsin(CAS#569-61-9) 0.70%
Sodium Metabisulfite(CAS#7681-57-4) 1.9%
Hydrochloric Acid(CAS#7647-01-0) 1.26%
TLV and PEL units:
Basic Fuchsin: No data available
Sodium Metabisulfite: ACGIH-TLV 5 mg/m3(TWA)
OSHA-PEL 5 mg/m3 (TWA)

3. HAZARD IDENTIFICATION

Emergency Overview: DO NOT INGEST! This product contains ingredients which are known to be poisonous (Hydrochloric Acid & Sodium Metabisulfite) & a suspected carcinogen (Basic Fuchsin)
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 - If swallowed, if conscious, give plenty of water. Immediately 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 and quiet, and get medical attention.

5. FIREFIGHTING PROCEDURES

Flash Point(Method Used): N/A
NFPA Rating: Health: 3
Fire: 0
Reactivity: 0

Extinguisher Media:

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Flammable Limits in Air % by Volume: 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: This product will not burn. This product will not explode.

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 tightly closed in a cool, dry area. Wear proper protective equipment when handling this material.

Other Precautions: Avoid prolonged inhalation of vapors. Do not get in eyes, on skin, or on clothing.

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: Yes
Mechanical(General): Yes
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: N/A
Melting Point: N/A
Boiling Point: N/A
Vapor Pressure: N/A
Specific Gravity(H₂O=1): N/A
Percent Volatile by Volume: 96%
Evaporation Rate(H₂O=1): N/A
Solubility in Water: Complete, product is an aqueous solution
Appearance and Odor: Clear, colorless liquid with faint odor of hydrochloric acid.

10. REACTIVITY DATA

Stability:
Conditions to Avoid: Heat
Incompatibility(Materials to Avoid): Strong oxidizing agents

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Hazardous Decomposition Products: When heated to decomposition it may emit toxic fumes of Cl⁻, HCl and NO_x
Hazardous Polymerization: Will not occur

11. TOXICITY DATA

Toxicity Data:

Basic Fuchsin: LD50(oral-mouse) 5000 mg/kg

Sodium Metabisulfite: LD50(ivn-rat) 115 mg/kg, LD50(par-mouse) 910 mg/kg

Hydrochloric Acid: LC50(ihl-rat) 3124 ppm/1H, LD50(oral-rbt) 900 mg/kg

Effects of Overexposure:

Acute: See section 3

Chronic:

Basic Fuchsin: Mutation data cited. Tumorigenic data cited. IARC Cancer

Review: Animal limited evidence, Human Inadequate Evidence IMEMDT 4,57, 74. NTP 7th Annual Report on Carcinogens, 1992: Anticipated to be a carcinogen.

Sodium Metabisulfite: Mutation data cited. Reproductive effects data cited.

Not listed as causing cancer by IARC, NTP, or OSHA.

Hydrochloric Acid: Mutation data cited. Reproductive effects data cited.

Not listed as causing cancer by IARC, NTP, or OSHA.

Conditions Aggravated by Overexposure: No data available

Target Organs: No data available

Primary Route(s) of Entry: No data available

12. ECOLOGICAL DATA

EPA Waste Numbers: Hydrochloric Acid D002

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.

14. TRANSPORT INFORMATION

Non-regulated

15. REGULATORY INFORMATION

EPA TSCA Status: On TSCA Inventory

Hazard Category for SARA Section 311/312 Reporting: Acute

Product or Components	SARA EHS Sec. 302 TPQ	SARA Sec. 313 Chemicals		CERCLA Sec. 103 RQ lbs.	RCRA Sec.
		Name	Chemical List Category		
261.33					
Basic Fuchsin	No	No	No	No	No
Sodium Metabisulfite	No	No	No	No	No
Hydrochloric Acid	500	Yes	No	5000	No

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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 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