

BIAL ORCINOL REAGENT
CAROLINA BIOLOGICAL SUPPLY COMPANY

1. PRODUCT DESCRIPTION

Product Name: Bial Orcinol Reagent
Product Code(s): 84-7651, 84-7653
Size: 100 mL, 500 mL
Chemical Name: Does not apply-Product is a mixture.
CAS Number: See section 2
Formula: See section 2
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

Principle Hazardous Components:
Hydrochloric acid (CAS# 7647-01-0) 99.3%
Orcinol (CAS# 504-15-4) 0.3%
Ferric chloride (CAS# 7705-08-0) 0.4%
TLV and PEL units: Orcinol: None established.
Ferric chloride: ACGIH-TLV 1 mg/(Fe)/m3 (TWA);
OSHA-PEL 1 mg/(Fe)/m3 (TWA).
Hydrochloric acid: ACGIH-TLV Ceiling 5 ppm;
OSHA-PEL Ceiling 5 ppm.

3. HAZARD IDENTIFICATION

Emergency Overview:
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.

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5. FIREFIGHTING PROCEDURES

Flash Point (Method Used): Noncombustible

NFPA Rating: Health: 3

Fire: 0

Reactivity: 0

Extinguisher Media:

Use media suitable to extinguish surrounding fire.

Flammable Limits in Air % by Volume: No data available.

Autoignition Temperature: No data available.

Special Firefighting Procedures:

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

Unusual Fire and Explosion Hazards: Not combustible but contact with common metals produces hydrogen which may form explosive mixtures with air. Soluble in water.

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 absorbant and containerize for disposal.

7. SPECIAL PRECAUTIONS

Precautions to be Taken in Handling or Storing: Keep container closed and protected against physical damage. Store separate from oxidizers. Add acid cautiously to water when diluting-never add water to acid. Wash thoroughly after handling.

Other Precautions: Do not get in eyes, on skin, or on clothing. Do not breathe vapor. 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 coat, eye wash, and safety shower.

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9. PHYSICAL DATA

Molecular Weight: No data available.

Melting Point: -74C

Boiling Point: about 110C

Vapor Pressure: 212 mm @ 20C

Vapor Density(Air=1): 1.13

Specific Gravity(H₂O=1): 1.1885

Percent Volatile by Volume: No data available.

Evaporation Rate(H₂O=1): about 2.0

Solubility in Water: complete

Appearance and Odor: clear, colorless, fuming liquid; pungent odor.

10. REACTIVITY DATA

Stability: Stable

Conditions to Avoid: Heat, contact with metals.

Incompatibility(Materials to Avoid): Bases, alkalies and amines. Reacts with metals to produce hydrogen gas. Iron and aluminum are corroded readily.

Hazardous Decomposition Products: Toxic hydrogen chloride gas.

Hazardous Polymerization: Will not occur

11. TOXICITY DATA

Toxicity Data: To the best of our knowledge, the toxicological properties of this mixture have not been thoroughly evaluated. Data is listed for individual components.

Orcinol: orl-rat LD50: 844 mg/kg;

skn-mam LD50: 7800 mg/kg;

Ferric chloride : orl-rat LD50: 1278 mg/kg; ivn-mus LD50: 142 mg/kg.

Hydrochloric acid: ihl-rat LC50; 33124 ppm/1H; orl-rbt LD50: 900 mg/kg.

Effects of Overexposure:

Acute: See section 3

Chronic: Orcinol: No chronic effects data found. 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.

Ferric Chloride: Reproductive effects data cited. Not listed as causing cancer by IARC, NTP, or OSHA.

Conditions Aggravated by Overexposure: Respiratory conditions.

Target Organs: Nasal and respiratory passages.

Primary Route(s) of Entry: Inhalation

12. ECOLOGICAL DATA

EPA Waste Numbers: Ferric chloride D002

Hydrochloric acid D002

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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

Description: Hydrochloric acid, solution, 8, UN1789, II

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. 261.33
		Name	Chemical List Category		
Orcinol	No	No	No	No	No
Ferric Chloride	No	No	No	1000	No
Hydrochloric acid	500	Yes	No	5000	No

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