

# **MATERIAL SAFETY DATA SHEET**

RIBOFLAVIN  
CAROLINA BIOLOGICAL

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

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## **1. PRODUCT DESCRIPTION**

Product Name: Riboflavin  
Product Code(s): 88-6470, 19-8520  
Size: 25g, 100g  
Chemical Name: Riboflavin  
CAS Number: 83-88-5  
Formula: C17H20N4O6  
Synonyms: Vitamin B2  
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: Riboflavin(CAS#83-88-5)100%  
TLV and PEL units: No data available

## **3. HAZARD IDENTIFICATION**

Emergency Overview: Irritating to skin, eyes, and respiratory system.

## **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): Noncombustible

NFPA Rating: Health: 1  
Fire: 0  
Reactivity: 0

Extinguisher Media:

Use dry chemical, CO2 or appropriate foam.

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: Thermal decomposition produces toxic fumes.

## **6. SPILL OR LEAK PROCEDURES**

Steps to be Taken in Case Material is Released or Spilled:

Ventilate area of spill. Clean-up personnel should wear proper protective equipment. Avoid creating dust. Sweep or scoop up and

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containerize for disposal.

### **7. SPECIAL PRECAUTIONS**

Precautions to be Taken in Handling or Storing: Keep container closed.  
Store

at controlled room temperature.

Other Precautions: Do not breathe dust or get in eyes.

### **8. SPECIAL PROTECTION INFORMATION**

Respiratory Protection(Specify Type): NIOSH-approved dust mask

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:	376.41
Melting Point:	282C decomposes
Boiling Point:	N/A
Vapor Pressure:	N/A
Vapor Density(Air=1):	N/A
Specific Gravity(H2O=1):	N/A
Percent Volatile by Volume:	N/A
Evaporation Rate(H2O=1):	N/A
Solubility in Water:	Slight
Appearance and Odor:	Yellow-Orange Solid

### **10. REACTIVITY DATA**

Stability: Stable

Conditions to Avoid: No data available

Incompatibility(Materials to Avoid): None identified

Hazardous Decomposition Products: NOx

Hazardous Polymerization: Will not occur

### **11. TOXICITY DATA**

Toxicity Data: orl-rat LD50: >10 g/kg

Effects of Overexposure: May cause irritation contact to eyes, skin and

inhalation. May cause nausea, vomiting, urine discoloration by ingestion.

Acute: See section 3

Chronic: Material is not listed (IARC, NTP, OSHA) as cancer causing agent. Mutation data cited.

Conditions Aggravated by Overexposure: N/A

Target Organs: Skin, eyes, respiratory tract

Primary Route(s) of Entry: Inhalation, ingestion, eyes, skin

### **12. ECOLOGICAL DATA**

EPA Waste Numbers: N/A

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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

N/A

## 15. REGULATORY INFORMATION

EPA TSCA Status: TSCA inventory Yes  
Hazard Category for SARA Section 311/312 Reporting: Acute, chronic  
SARA Sec. 313  
Product or SARA EHS Chemicals CERCLA RCRA  
Components Sec. 302 Name Chemical Sec. 103 Sec.  
TPQ List Category RQ lbs.  
261.33

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Riboflavin	No	No	No	No	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