Section 1  
Product Description

Product Name: Formula 4-24®  
Recommended Use: Science education applications  
Synonyms: N/A
Distributor: Carolina Biological Supply Company  
2700 York Road, Burlington, NC 27215  
1-800-227-1150

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

Section 2  
Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

GHS Classification:

Other Safety Precautions:  
Not a dangerous substance according to GHS classification criteria.  
No known OSHA hazards.  
May cause gastrointestinal discomfort.  
May cause irritation to respiratory tract.  
May cause eye irritation.

Section 3  
Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formula 4-24®</td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

A proprietary mixture of non-hazardous ingredients.

Section 4  
First Aid Measures

Emergency and First Aid Procedures

Inhalation: In case of accident by inhalation: remove casualty to fresh air and keep at rest.
Eyes: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Skin Contact: 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.

Section 5  
Firefighting Procedures

Extinguishing Media: Use media suitable to extinguish surrounding fire.
Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.
Fire and/or Explosion Hazards: Avoid Dusting. May become explosive when dispersed in air.
Hazardous Combustion Products: Carbon dioxide, Carbon monoxide

Section 6  
Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled: No adverse health affects expected from the clean-up of spilled material. Follow personal protective equipment recommendations found in Section 8 of this (M)SDS. Ventilate the contaminated area.
Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Vacuum or sweep up material and place in a disposal container.

### Section 7 Handling and Storage

**Handling:** Keep container tightly closed in a cool, well-ventilated place.

**Storage:** N/A

**Storage Code:** Green - general chemical storage

### Section 8 Protection Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH (TWA)</th>
<th>ACGIH (STEL)</th>
<th>OSHA PEL (TWA)</th>
<th>OSHA PEL (STEL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No data available</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Control Parameters**

**Engineering Measures:** No exposure limits exist for the constituents of this product. General room ventilation might be required to maintain operator comfort under normal conditions of use.

**Personal Protective Equipment (PPE):**

- **Respiratory Protection:** No respiratory protection required under normal conditions of use.
- **Eye Protection:** Wear chemical splash goggles when handling this product. Have an eye wash station available.
- **Skin Protection:** Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

**Gloves:** Natural rubber, Neoprene, Nitrile, Polyvinyl chloride

### Section 9 Physical Data

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formula:</td>
<td>Proprietary mixture - Trade Secret Formula.</td>
</tr>
<tr>
<td>Molecular Weight:</td>
<td>N/A</td>
</tr>
<tr>
<td>Appearance:</td>
<td>White, or blue, flakes and powder with no odor.</td>
</tr>
<tr>
<td>Odor:</td>
<td>No data available</td>
</tr>
<tr>
<td>Odor Threshold:</td>
<td>No data available</td>
</tr>
<tr>
<td>pH:</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting Point:</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling Point:</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash Point:</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammable Limits in Air:</td>
<td>N/A</td>
</tr>
<tr>
<td>Specific Gravity:</td>
<td>N/A</td>
</tr>
<tr>
<td>Solubility in Water:</td>
<td>Slightly Soluble</td>
</tr>
<tr>
<td>Log Pow (calculated):</td>
<td>No data available</td>
</tr>
<tr>
<td>Autoignition Temperature:</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition Temperature:</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>No data available</td>
</tr>
<tr>
<td>Percent Volatile by Volume:</td>
<td>0%</td>
</tr>
</tbody>
</table>

### Section 10 Reactivity Data

- **Reactivity:** No data available
- **Chemical Stability:** Stable under normal conditions.
- **Conditions to Avoid:** Dusting.
- **Hazardous Polymerization:** Will not occur

### Section 11 Toxicity Data

- **Routes of Entry:** N/A
- **Symptoms (Acute):** N/A
- **Delayed Effects:** No data available

- **Acute Toxicity:**
  - **Chemical Name:** No data available
  - **CAS Number:** Not determined
  - **Oral LD50:** Not determined
  - **Dermal LD50:** Not determined
  - **Inhalation LC50:** Not determined

- **Carcinogenicity:**
Safety Data Sheet

Formula 4-24®

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Chemical Name | CAS Number | IARC | NTP | OSHA
--- | --- | --- | --- | ---
No data available | | | | |

Chronic Effects:

- Mutagenicity: No evidence of a mutagenic effect.
- Teratogenicity: No evidence of a teratogenic effect (birth defect).
- Sensitization: No evidence of a sensitization effect.
- Reproductive: No evidence of negative reproductive effects.

Target Organ Effects:

- Acute: See Section 2
- Chronic: Not listed as a carcinogen by IARC, NTP or OSHA.

Section 12 Ecological Data

Overview: This material is not expected to be harmful to the ecology.

Mobility: No data
Persistence: No data
Bioaccumulation: No data
Degradability: No data
Other Adverse Effects: No data

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Eco Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 13 Disposal Information

Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.

Waste Disposal Code(s): Not Determined

Section 14 Transport Information

Ground - DOT Proper Shipping Name: N/A
Air - IATA Proper Shipping Name: Not regulated for air transport by IATA.

Section 15 Regulatory Information

TSCA Status: A component (or components) of this product is not listed on the TSCA Inventory of Existing Chemical Substances. Product is for research and development use only.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>§ 313 Name</th>
<th>§ 304 RQ</th>
<th>CERCLA RQ</th>
<th>§ 302 TPQ</th>
<th>CAA 112(2) TQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>No data available</td>
<td></td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Section 16 Additional Information

Revised: 09/09/2015
Replaces: 07/31/2015
Printed: 10-29-2015

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.

Glossary

ACGIH American Conference of Governmental Industrial Hygienists
CAS Chemical Abstract Service Number
CERCLA Comprehensive Environmental Response, Compensation, and Liability Act
DOT U.S. Department of Transportation
IARC International Agency for 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
IDLH Immediately dangerous to life and health