

# Safety Data Sheet

## Simulated Blood

**CAROLINA**<sup>®</sup>  
www.carolina.com

### Section 1

### Product Description

**Product Name:** Simulated Blood  
**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)  
**Chemtrec:** 800-424-9300 (Transportation Spill Response 24 hours)

### Section 2

### Hazard Identification

**Classification of the chemical in accordance with paragraph (d) of §1910.1200;**  
No known OSHA hazards.

**GHS Classification:**

**Other Safety Precautions:** Not a dangerous substance according to GHS classification criteria.  
May cause eye irritation.  
May cause gastrointestinal discomfort.  
May cause irritation to respiratory tract.  
May cause irritation to skin.

### Section 3

### Composition / Information on Ingredients

**Chemical Name**

The composition of this mixture is proprietary and is protected as a Trade Secret.

**CAS #**  
N/A

**%**  
100

### 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, 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:** Fire or excessive heat may produce hazardous decomposition products.  
**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.  
No special spill clean-up considerations. Collect and discard in regular trash.

### Section 7

### Handling and Storage

**Storage:** Keep container tightly closed in a cool, well-ventilated place.  
**Storage Code:** Green - general chemical storage

# Safety Data Sheet

## Section 8

## Protection Information

| <u>Chemical Name</u>                        | <u>(TWA)</u>   | <u>ACGIH</u> | <u>(STEL)</u> | <u>(TWA)</u> | <u>OSHA PEL</u> | <u>(STEL)</u> |
|---|--|--------------|---------------|--------------|-----------------|---------------|
| No data available                           | N/A  |              | N/A           | N/A          |                 | N/A           |
| <b>Control Parameters</b>                   |  |              |               |              |                 |               |
| <b>Engineering Measures:</b>                | 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.   |              |               |              |                 |               |
| <b>Personal Protective Equipment (PPE):</b> | Lab coat, apron, eye wash, safety shower.  |              |               |              |                 |               |
| <b>Respiratory Protection:</b>              | No respiratory protection required under normal conditions of use.   |              |               |              |                 |               |
| <b>Eye Protection:</b>                      | Wear chemical splash goggles when handling this product. Have an eye wash station available.   |              |               |              |                 |               |
| <b>Skin Protection:</b>                     | 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. |              |               |              |                 |               |
| <b>Gloves:</b>                              | Natural latex,, Natural rubber, Neoprene, Nitrile, Polyvinyl chloride  |              |               |              |                 |               |

## Section 9

## Physical Data

|   |   |
|---|---|
| <b>Formula:</b> N/A, product is a mixture | <b>Vapor Pressure:</b> N/A                          |
| <b>Molecular Weight:</b> N/A              | <b>Evaporation Rate (BuAc=1):</b> N/A               |
| <b>Appearance:</b> Red Liquid             | <b>Vapor Density (Air=1):</b> N/A                   |
| <b>Odor:</b> None                         | <b>Specific Gravity:</b> N/A                        |
| <b>Odor Threshold:</b> No data available  | <b>Solubility in Water:</b> Soluble                 |
| <b>pH:</b> No data available              | <b>Log Pow (calculated):</b> No data available      |
| <b>Melting Point:</b> No data available   | <b>Autoignition Temperature:</b> No data available  |
| <b>Boiling Point:</b> No data available   | <b>Decomposition Temperature:</b> No data available |
| <b>Flash Point:</b> No data available     | <b>Viscosity:</b> No data available                 |
| <b>Flammable Limits in Air:</b> N/A       | <b>Percent Volatile by Volume:</b> N/A              |

## Section 10

## Reactivity Data

|                                  |   |
|----------------------------------|---|
| <b>Reactivity:</b>               | No data available                                 |
| <b>Chemical Stability:</b>       | Stable under normal conditions.                   |
| <b>Conditions to Avoid:</b>      | None known.                                       |
| <b>Incompatible Materials:</b>   | Acids, Caustics (bases), Water-reactive materials |
| <b>Hazardous Polymerization:</b> | Will not occur                                    |

# Safety Data Sheet

## Section 11

## Toxicity Data

**Routes of Entry:** Inhalation, ingestion, eye or skin contact.  
**Symptoms (Acute):** N/A  
**Delayed Effects:** No data available

### Acute Toxicity:

**Chemical Name:**  
No data available

**CAS Number:**  
N/A

**Oral LD50:**  
Not determined

**Dermal LD50:**  
Not determined

**Inhalation LC50:**  
Not determined

### Carcinogenicity:

**Chemical Name:**  
No data available

**CAS Number:**  
N/A

**IARC:**  
Not listed

**NTP:**  
Not listed

**OSHA:**  
Not listed

### 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:** N/A

## 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

**Chemical Name:**  
N/A

**CAS Number:**  
N/A

**Eco Toxicity:**

## 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:**  
Not regulated for transport by DOT.

**Air - IATA Proper Shipping Name:**  
Not regulated for air transport by IATA.

# Safety Data Sheet

## 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.

| Chemical Name     | CAS Number | § 313 Name | § 304 RQ | CERCLA RQ | § 302 TPQ | CAA 112(2) TQ |
|-------------------|------------|------------|----------|-----------|-----------|---------------|
| No data available | N/A        | No         | No       | No        | No        | No            |

## Section 16

## Additional Information

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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             | NTP  | National Toxicology Program                   |
| CAS    | Chemical Abstract Service Number                                      | OSHA | Occupational Safety and Health Administration |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act | PEL  | Permissible Exposure Limit                    |
| DOT    | U.S. Department of Transportation                                     | ppm  | Parts per million                             |
| IARC   | International Agency for Research on Cancer                           | RCRA | Resource Conservation and Recovery Act        |
| N/A    | Not Available   | SARA | Superfund Amendments and Reauthorization Act  |
|        |   | TLV  | Threshold Limit Value                         |
|        |   | TSCA | Toxic Substances Control Act                  |
|        |   | IDLH | Immediately dangerous to life and health      |