

# Safety Data Sheet

## Methyl Red, 0.2%, Alcoholic

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

### Section 1 Product Description

**Product Name:** Methyl Red, 0.2%, Alcoholic  
**Recommended Use:** Science education applications  
**Synonyms:** Methyl Red Reagent  
**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;

**DANGER**



Flammable liquid and vapor. Causes eye irritation. May cause cancer. Toxic to aquatic life.

**GHS Classification:**

Carcinogenicity Category 1A, Serious Eye Damage/Eye Irritation Category 2B, Hazardous to the aquatic environment - Acute Category 2, Flammable Liquid Category 3

**Other Safety Precautions:** IF exposed or concerned: Get medical advice/attention.

### Section 3 Composition / Information on Ingredients

| <u>Chemical Name</u> | <u>CAS #</u> | <u>%</u> |
|----------------------|--------------|----------|
| Ethyl alcohol        | 64-17-5      | 51.54    |
| Water                | 7732-18-5    | 42.8     |
| Isopropyl Alcohol    | 67-63-0      | 2.88     |
| Methanol             | 67-56-1      | 2.58     |
| Methyl Red           | 493-52-7     | 0.2      |

### 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:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.  
**Skin Contact:** IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
**Ingestion:** If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

### Section 5 Firefighting Procedures

**Extinguishing Media:** Use dry chemical, CO<sub>2</sub> or appropriate foam.  
**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

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## Section 6

## Spill or Leak Procedures

### Steps to Take in Case Material Is Released or Spilled:

No health affects expected from the clean-up of this material if contact can be avoided. Follow personal protective equipment recommendations found in Section 8 of this (M)SDS. Ventilate the contaminated area. Evaporation of volatile substances can lead to the displacement of air creating an environment that can cause asphyxiation. Isolate area. Keep unnecessary personnel away. Ventilate the area by opening door and/or turning on fans and blowers. Use an inert absorbent such as sand or vermiculite. Place in properly labeled closed container. Shut off ignition sources; including electrical equipment and flames. Do not allow smoking in the area.

## Section 7

## Handling and Storage

### Handling:

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/.../equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wash thoroughly after handling. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. Use personal protective equipment as required.

### Storage:

Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up. Suitable for any general chemical storage.

### Storage Code:

Red - Flammables. Store in approved flammable containers. Store away from oxidizing materials.

## Section 8

## Protection Information

| Chemical Name     | ACGIH       |               | OSHA PEL                        |        |
|-------------------|-------------|---------------|---------------------------------|--------|
|                   | (TWA)       | (STEL)        | (TWA)                           | (STEL) |
| Ethyl alcohol     | N/A         | 1000 ppm STEL | 1000 ppm TWA;<br>1900 mg/m3 TWA | N/A    |
| Isopropyl Alcohol | 200 ppm TWA | 400 ppm STEL  | 400 ppm TWA; 980<br>mg/m3 TWA   | N/A    |
| Methanol          | 200 ppm TWA | 250 ppm STEL  | 200 ppm TWA; 260<br>mg/m3 TWA   | N/A    |

### Control Parameters

#### Engineering Measures:

Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.

#### Personal Protective Equipment (PPE):

Lab coat, apron, eye wash, safety shower.

#### Respiratory Protection:

Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms.

#### Respirator Type(s):

None required where adequate ventilation is provided. If airborne concentrations are above the applicable exposure limits, use NIOSH/MSHA approved respiratory protection.

#### 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:

Nitrile

## Section 9

## Physical Data

**Formula:** See Section 3

**Molecular Weight:** N/A

**Appearance:** Red Colorless Liquid

**Odor:** Moderate Alcohol Odor Fruity

**Odor Threshold:** No data available

**pH:** No data available

**Melting Point:** -114 C

**Boiling Point:** Estimated 81 C

**Flash Point:** 24 C

**Flammable Limits in Air:** No data available

**Vapor Pressure:** No data available

**Evaporation Rate (BuAc=1):** No data available

**Vapor Density (Air=1):** No data available

**Specific Gravity:** 0.9

**Solubility in Water:** Soluble

**Log Pow (calculated):** No data available

**Autoignition Temperature:** No data available

**Decomposition Temperature:** No data available

**Viscosity:** No data available

**Percent Volatile by Volume:** 50%

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## Section 10

## Reactivity Data

|                                          |                                                                                                       |
|------------------------------------------|-------------------------------------------------------------------------------------------------------|
| <b>Reactivity:</b>                       | Not generally reactive under normal conditions.                                                       |
| <b>Chemical Stability:</b>               | Stable under normal conditions.                                                                       |
| <b>Conditions to Avoid:</b>              | Temperatures above flash point in combination with sparks, open flames, or other sources of ignition. |
| <b>Incompatible Materials:</b>           | Water-reactive materials, Strong oxidizing agents, Acids, Strong reducing agents, Magnesium           |
| <b>Hazardous Decomposition Products:</b> | Carbon oxides                                                                                         |
| <b>Hazardous Polymerization:</b>         | Will not occur                                                                                        |

## Section 11

## Toxicity Data

|                          |                                                                  |
|--------------------------|------------------------------------------------------------------|
| <b>Routes of Entry</b>   | Inhalation, ingestion, eye or skin contact.                      |
| <b>Symptoms (Acute):</b> | Dizziness, Depressed Activity, Central Nervous System Depression |
| <b>Delayed Effects:</b>  | No data available                                                |

### Acute Toxicity:

| Chemical Name     | CAS Number | Oral LD50                                                    | Dermal LD50 | Inhalation LC50                     |
|-------------------|------------|--------------------------------------------------------------|-------------|-------------------------------------|
| Water             | 7732-18-5  | Oral LD50 Rat<br>90000 mg/kg                                 |             |                                     |
| Isopropyl Alcohol | 67-63-0    | Oral LD50 Rat<br>5045 mg/kg<br>Oral LD50 Mouse<br>3600 mg/kg |             | INHALATION<br>LC50 Rat 16000<br>ppm |
| Methanol          | 67-56-1    | Oral LD50 Mouse<br>7300 mg/kg                                |             | INHALATION<br>LC50 Rat 64000<br>ppm |

### Carcinogenicity:

| Chemical Name     | CAS Number | IARC       | NTP        | OSHA       |
|-------------------|------------|------------|------------|------------|
| Ethyl alcohol     | 64-17-5    | Listed     | Listed     | Listed     |
| Isopropyl Alcohol | 67-63-0    | Listed     | Not listed | Not listed |
| Methanol          | 67-56-1    | Not listed | Not listed | Not listed |

### Chronic Effects:

|                              |                                                     |
|------------------------------|-----------------------------------------------------|
| <b>Mutagenicity:</b>         | No evidence of a mutagenic effect.                  |
| <b>Teratogenicity:</b>       | No evidence of a teratogenic effect (birth defect). |
| <b>Sensitization:</b>        | No evidence of a sensitization effect.              |
| <b>Reproductive:</b>         | No evidence of negative reproductive effects.       |
| <b>Target Organ Effects:</b> |                                                     |
| <b>Acute:</b>                | No data available                                   |
| <b>Chronic:</b>              | No data available                                   |

## Section 12

## Ecological Data

|                               |                                                                                                |
|-------------------------------|------------------------------------------------------------------------------------------------|
| <b>Overview:</b>              | This material is not expected to be harmful to the ecology.                                    |
| <b>Mobility:</b>              | This material is expected to have high mobility in soil. It absorbs weakly to most soil types. |
| <b>Persistence:</b>           | Biodegradation                                                                                 |
| <b>Bioaccumulation:</b>       | Bioconcentration is not expected to occur.                                                     |
| <b>Degradability:</b>         | Biodegrades at a moderate rate.                                                                |
| <b>Other Adverse Effects:</b> | No data                                                                                        |

| Chemical Name | CAS Number | Eco Toxicity                                                                                                                                                                        |
|---------------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ethyl alcohol | 64-17-5    | 96 HR LC50 PIMEPHALES PROMELAS > 100 MG/L [STATIC]<br>48 HR EC50 DAPHNIA MAGNA 2 MG/L [STATIC]<br>24 HR EC50 DAPHNIA MAGNA 10800 MG/L<br>48 HR LC50 DAPHNIA MAGNA 9268 - 14221 MG/L |
| Water         | 7732-18-5  | No data available                                                                                                                                                                   |

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|                   |         |                                                                                                                                                                                                                                                |
|-------------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Isopropyl Alcohol | 67-63-0 | 96 HR LC50 LEPOMIS MACROCHIRUS > 1400000 µG/L<br>96 HR LC50 PIMEPHALES PROMELAS 11130 MG/L [STATIC]<br>48 HR EC50 DAPHNIA MAGNA 13299 MG/L<br>72 HR EC50 DESMODESMUS SUBSPICATUS > 1000 MG/L<br>96 HR EC50 DESMODESMUS SUBSPICATUS > 1000 MG/L |
| Methanol          | 67-56-1 | 96 HR LC50 PIMEPHALES PROMELAS > 100 MG/L [STATIC]                                                                                                                                                                                             |

## Section 13

## Disposal Information

|                                |                                                                                                                                                       |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Disposal Methods:</b>       | Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance. |
| <b>Waste Disposal Code(s):</b> | If discarded, this product is considered a RCRA ignitable waste, D001.                                                                                |

## Section 14

## Transport Information

|                                                                                                                        |                                                                                                                      |
|------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| <b>Ground - DOT Proper Shipping Name:</b><br>UN1993<br>Flammable liquids, n.o.s.(Ethyl alcohol)<br>Class 3<br>P.G. III | <b>Air - IATA Proper Shipping Name:</b><br>UN1993<br>Flammable liquids, n.o.s.(Ethyl alcohol)<br>Class 3<br>P.G. III |
|------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|

## Section 15

## Regulatory Information

|                     |                                                           |
|---------------------|-----------------------------------------------------------|
| <b>TSCA Status:</b> | All components in this product are on the TSCA Inventory. |
|---------------------|-----------------------------------------------------------|

| Chemical Name     | CAS Number | § 313 Name        | § 304 RQ | CERCLA RQ | § 302 TPQ | CAA 112(2) TQ |
|-------------------|------------|-------------------|----------|-----------|-----------|---------------|
| Isopropyl Alcohol | 67-63-0    | Isopropyl alcohol | No       | No        | No        | No            |
| Methanol          | 67-56-1    | No                | No       | No        | No        | No            |

California Prop 65:



WARNING: Cancer and Reproductive Harm –  
www.P65Warnings.ca.gov

## Section 16

## Additional Information

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Printed: 08-25-2018

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      |