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# MATERIAL SAFETY DATA SHEET

MSDS No.: AA0089-SET/6  
 Effective Date: March 6, 2008

## SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

|                   |                      |
|-------------------|----------------------|
| Product           | Agarose Dye Marker   |
| Chemical Synonyms | N/A                  |
| Formula           | Contains 6 solutions |
| Unit Size         | 1 mL each Set of 6   |
| C.A.S. No.        | Product is a kit     |
| HAZARD RATING     | MINIMAL 0            |
|                   | SLIGHT 1             |
| REACTIVITY        | MODERATE 2           |
|                   | SERIOUS 3            |
| SEVERE            | SEVERE 4             |

## SECTION II INGREDIENTS OF MIXTURES

| Principal Component(s)   | % | TLV Units |
|--|---|-----------|
| Sodium benzoate: (CAS No. 532-32-1), 0.2% as preservative: A) Bromophenol blue: (CAS No. 62825-28-9).. 0.07%,<br>B) Xylene cyanol: (CAS No. 4463-44-9).. 0.05%, C) Orange G: (CAS No. 1936-15-8).. 0.35%, D) Crystal Violet:<br>(CAS No. 548-62-9).. 0.03%, E) Malachite Green HCl: (CAS No. 569-64-2).. 0.1%, F) Dye Mixture. |   |           |

## SECTION III PHYSICAL DATA

|                        |                   |   |              |
|------------------------|-------------------|---|--------------|
| Melting Point (°F)     | 0°C (32°F)        | Specific Gravity (H <sub>2</sub> O = 1) | Approx. 1.0  |
| Boiling Point (°F)     | 100°C (212°F)     | Percent Volatile by Volume (%)          | ~60%         |
| Vapor Pressure (mm Hg) | 14 (water)        | Evaporation Rate (Water =1)             | Less than 1. |
| Vapor Density (Air=1)  | 0.7 (water)       |   |              |
| Solubility in Water    | Soluble.          |   |              |
| Appearance & Odor      | Variable liquids. |   |              |

## SECTION IV FIRE AND EXPLOSION HAZARD DATA

|                           |                |                                     |     |       |       |
|---------------------------|----------------|-------------------------------------|-----|-------|-------|
| Flash Point (Method Used) | Non-flammable. | Flammable Limits in Air % by Volume | N/A | Lower | Upper |
|---------------------------|----------------|-------------------------------------|-----|-------|-------|

Extinguisher Media Use any media suitable for extinguishing supporting fire or surrounding fire.

## SPECIAL FIREFIGHTING PROCEDURES

In fire condition, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective clothing.

## UNUSUAL FIRE AND EXPLOSION HAZARDS

In fire conditions, water may evaporate from solutions which may produce hazardous decomposition products.

## D.O.T. NON-REGULATED.

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20

## SECTION V HEALTH HAZARD DATA

Threshold Limited Value None established for mixtures contained in this kit.

## Effects of Overexposure

May be harmful by inhalation and ingestion. May cause irritation. To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated. Specific data is not available. Target organs: None known.

## Emergency and First Aid Procedures

**INGESTION:** Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person. **EYES:** Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention. **SKIN:** Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention. **INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

## SECTION VI REACTIVITY DATA

|           |          |                     |  |
|-----------|----------|---------------------|--|
| Stability | Unstable | Conditions to Avoid | Excessive temperature and heat to cause evaporation. |
|           | Stable   |                     |  |

## Incompatibility (Materials to Avoid)

Strong oxidizing agents, acids.

## Hazardous Decomposition Products

Combustion will produce carbon dioxide and/or carbon monoxide and probably emits toxic fumes of oxides of sulfur, nitrogen as well as chlorine, bromine, ammonia.

## Hazardous Polymerization

May Occur Will Not Occur

## SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled Absorb with an inert dry material, sweep up and place in suitable container for disposal. Wash spill area with soap and water.

## Waste Disposal Method

Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only. Dispose of in accordance with all federal, state and local regulations.

## SECTION VIII SPECIAL PROTECTION INFORMATION

|                                       |  |
|---------------------------------------|--|
| Respiration Protection (Specify Type) | None needed in normal laboratory handling. If misty conditions prevail, work in a ventilation hood or wear a NIOSH/MSHA-approved respirator. |
| Ventilation                           | Local Exhaust Recommended. Special No. Mechanical (General) Recommended. Other No.   |
| Protective Gloves                     | Rubber. Eye Protection Chemical safety glasses.  |
| Other Protective Equipment            | Lab coat, apron, eye wash station, gloves.   |

## SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing Keep container tightly closed. Store in a cool, dry place away from strong oxidizing materials. Wash thoroughly after handling.

## Other Precautions

Read label on container before using. Do not wear contact lenses when working with chemicals. For laboratory use only. Not for drug, food or household use. Keep out of reach of children. Avoid contact with skin, eyes and clothing. Avoid breathing spray mist. Remove and wash contaminated clothing.

|              |   |      |          |          |                  |                             |     |
|--------------|---|------|----------|----------|------------------|-----------------------------|-----|
| Revision No. | 2 | Date | 03/06/08 | Approved | James A. Bertsch | Chemical Safety Coordinator | JAB |
|--------------|---|------|----------|----------|------------------|-----------------------------|-----|

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