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## MATERIAL SAFETY DATA SHEET

### EMERGENCY ASSISTANCE - 24 hour

For emergency assistance involving chemicals call CHEMTREC (800) 424-9300.

### SECTION 1: MATERIAL INFORMATION

**Common Name:** CARBOLFUCHSIN-DMSO STAIN SOLUTION  
**Synonyms:** Brook CF Stain  
**Catalog Number:** R5850  
**CAS #:** N/AV  
**WARNING:** POISON, CARCINOGEN, FLAMMABLE

### SECTION 2: HAZARDOUS INGREDIENTS

<u>Hazardous Components</u>	<u>CAS #</u>	<u>Chemical Family</u>	<u>Molecular Formula</u>	<u>Approximate Concentration</u>
Basic Fuchsin	632-99-5	Basic Dye	C <sub>20</sub> H <sub>9</sub> N <sub>3</sub> Cl	1.6%
DMSO	67-68-5	N/AV	C <sub>2</sub> H <sub>6</sub> OS	10%
Ethanol	64-17-5	Alcohol	C <sub>2</sub> H <sub>5</sub> OH	10%
Phenol	108-95-2	Organic Acid	C <sub>6</sub> H <sub>5</sub> OH	4.8%

### SECTION 3: PHYSICAL DATA

<b>Appearance:</b> Heavy, opaque, red liquid	<b>pH:</b> N/AV	<b>Vapor Density:</b> N/AV
<b>Boiling Point:</b> N/AV	<b>Solubility in Water:</b> Slight	<b>Flash Point:</b> 53°C (128°F) cc
<b>Melting Point:</b> N/AV	<b>Vapor Pressure:</b> N/AV	<b>Evaporation Rate:</b> N/AV
<b>Odor:</b> Pungent odor	<b>Specific Gravity:</b> N/AV	

### SECTION 4: FIRE AND EXPLOSION HAZARD

**Flammable:** Yes

**Flammability Limits:**

Upper: N/AV      Lower: N/AV

**Extinguish Media:**

Water spray, carbon dioxide, dry chemical, "alcohol" or polymer foam.

**Special Hazards:**

Wear self-contained, positive-pressure breathing apparatus and full protective clothing.

**Unusual Fire and Explosion Hazards:**

May form explosive mixtures with air.

### SECTION 5: REACTIVITY DATA

**Stable:**       **Unstable:**

**Conditions to Avoid:**

Heat, sparks, open flame

**Materials to Avoid:**

- Water -
- Acids -
- Bases -
- Corrosives -
- Oxidizers -
- Other: Acid Chlorides, phosphorus halides, Aluminum chloride and Nitrobenzene, Butadiene, Calcium Hypochlorite

**Hazardous Decomposition Products:**

Carbon monoxide, carbon dioxide, sulfur oxides

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**SECTION 6: HEALTH HAZARD DATA**


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To the best of our knowledge, the chemical, physical, and toxicological properties of this mixture have not been thoroughly investigated. Presented below are specific data on each of the subcomponent ingredients:

<u>Hazardous Component</u>	<u>%</u>	<u>Threshold Limit Value</u>	<u>TXDS</u>
Basic Fuchsin	1.6%	N/AV	N/AV
DMSO	1.0%	N/AV	ORL-RAT LD50: 14500 mg/kg LPR-RAT LD50: 8200 mg/kg SCU-RAT LD50: 14 gm/kg LVN-DOG LD50: 2500 mg/kg
Ethanol	10%	1000 ppm	N/AV
Phenol	4.8%	5 ppm or 19 mg/M <sup>3</sup>	ORL-RAT LD50: 414 mg/kg

**Effects of Overexposure (Acute and Chronic):****POISON:** Contains PHENOL

May cause skin and eye burns, may penetrate skin. May cause collapse and death. May cause allergic reactions. Breathing vapors may cause irritation and vomiting.

**Carcinogenicity:** This product contains a carcinogen at 0.1% or greater.

**First Aid Procedure:****Skin Contact:** Wash with soap and copious amounts of water.**Eye Contact:** Wash with copious amounts of water.**Inhalation:** Remove to fresh air. If not breathing, give artificial respiration; if breathing is difficult, give oxygen; seek medical attention.**Ingestion:** Do not induce vomiting. Give milk or water and get medical attention immediately.

In all cases of overexposure seek medical attention.

Wash contaminated clothing before reuse.

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**SECTION 7: SPILL OR LEAK PROCEDURES AND DISPOSAL****Steps to be taken if Material is Released or Spilled:**

Ventilate area. Pick up with an absorbent material. Wash spill area.

**Waste Disposal Method:**

Observe all local, provincial, state, and federal regulations.

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**SECTION 8: SPECIAL PROTECTION INFORMATION**

Provide adequate general mechanical and local exhaust ventilation.

Avoid prolonged or repeated inhalation of vapor.

Protect eyes, skin, and clothing with safety goggles and gloves.

Wash thoroughly after handling.

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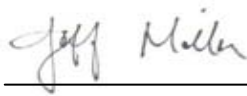
**SECTION 9: SPECIAL HANDLING AND STORAGE PRECAUTIONS**

Keep container tightly closed. Store in cool dry area. Protect from physical damage.

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**SECTION 10: MSDS PREPARATION AND INFORMATION**

Date Issued: 9/89  
Current Revision: 1/08  
Revised By: Jeff Miller

Authorized Signature: 

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## MATERIAL SAFETY DATA SHEET

### EMERGENCY ASSISTANCE - 24 hour

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### SECTION 1: MATERIAL INFORMATION

**Common Name:** MALACHITE GREEN DECOLORIZER/COUNTERSTAIN  
**Synonyms:** N/AP  
**Catalog Number:** R5875, R5850  
**CAS #:** N/AV  
**WARNING:** POISON

### SECTION 2: HAZARDOUS INGREDIENTS

<u>Hazardous Components</u>	<u>CAS #</u>	<u>Chemical Family</u>	<u>Molecular Formula</u>	<u>Approximate Concentration</u>
Acetic Acid, Glacial	64-19-7	Organic Acid	CH <sub>3</sub> COOH	10%
Malachite Green	2437-29-8	Basic Dye	C <sub>48</sub> H <sub>5</sub> ON <sub>4</sub> O <sub>4</sub>	1.5%

### SECTION 3: PHYSICAL DATA

<b>Appearance:</b> Opaque green liquid	<b>pH:</b> N/AV	<b>Vapor Density:</b> N/AV
<b>Boiling Point:</b> N/AV	<b>Solubility in Water:</b> Appreciable	<b>Flash Point:</b> N/AV
<b>Melting Point:</b> N/AV	<b>Vapor Pressure:</b> N/AV	<b>Evaporation Rate:</b> N/AV
<b>Odor:</b> Pungent odor	<b>Specific Gravity:</b> N/AV	

### SECTION 4: FIRE AND EXPLOSION HAZARD

**Flammable:** No

**Flammable Limits:**

Upper: N/AP      Lower: N/AP

**Extinguish Media:**

CO<sub>2</sub>, dry chemical powder, water spray to cool fire-exposed containers.

**Special Hazards:**

Wear self-contained, positive-pressure breathing apparatus and full protective clothing.

**Unusual Fire and Explosion Hazards:**

Emits toxic fumes under fire conditions.

### SECTION 5: REACTIVITY DATA

Stable:       Unstable:

**Conditions to Avoid:**

Heat, sparks, open flame

**Materials to Avoid:**

- Water -
- Acids -
- Bases -
- Corrosives -
- Oxidizers -
- Other: Strong alkalis, most metals, amines, nitric acid

**Hazardous Decomposition Products:**

Carbon monoxide, carbon dioxide, nitrogen oxides, acid fumes.

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**SECTION 6: HEALTH HAZARD DATA**


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To the best of our knowledge, the chemical, physical, and toxicological properties of this mixture have not been thoroughly investigated. Presented below are specific data on each of the subcomponent ingredients:

<u>Hazardous Component</u>	<u>%</u>	<u>Threshold Limit Value</u>	<u>TXDS</u>
Acetic Acid, Glacial	10%	10 ppm	ORL-HMN LDLO: 1470 mcg/kg
Malachite Green	1.5%	N/AV	N/AV

**Effects of Overexposure (Acute and Chronic):**

May cause burns, eye damage, blindness, coughing, chest pain, damage to nasal and respiratory passages, mucous membranes, throat tissue, nausea and vomiting.

**Carcinogenicity:** These products do not contain any carcinogens at 0.1% or greater.

**First Aid Procedure:**

**Skin Contact:** Wash with soap and copious amounts of water.

**Eye Contact:** Flush with copious amounts of water for 15 minutes. Seek medical attention.

**Inhalation:** Remove to fresh air. If not breathing, give artificial respiration; if breathing is difficult, give oxygen; seek medical attention.

**Ingestion:** Do not induce vomiting. Give water or milk of magnesia. Seek medical attention immediately.

In all cases of overexposure seek medical attention.

Wash contaminated clothing before reuse.

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**SECTION 7: SPILL OR LEAK PROCEDURES AND DISPOSAL**


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**Steps to be taken if Material is Released or Spilled:**

Ventilate area. Pick up using sodium bicarbonate and water. Wash area after picked up.

**Waste Disposal Method:**

Observe all local, provincial, state, and federal regulations.

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**SECTION 8: SPECIAL PROTECTION INFORMATION**


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Provide adequate general mechanical and local exhaust ventilation.

Avoid prolonged or repeated inhalation of vapor.

Protect eyes, skin, and clothing with safety goggles and gloves.

Wash thoroughly after handling.

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**SECTION 9: SPECIAL HANDLING AND STORAGE PRECAUTIONS**


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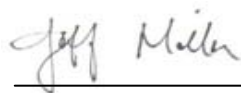
Store in cool dry area. Keep from physical damage. Keep container tightly closed.

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**SECTION 10: MSDS PREPARATION AND INFORMATION**


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**Date Issued:** 9/89  
**Current Revision:** 1/08  
**Revised By:** Jeff Miller



Authorized Signature: \_\_\_\_\_

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## MATERIAL SAFETY DATA SHEET

### EMERGENCY ASSISTANCE - 24 hour

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### SECTION 1: MATERIAL INFORMATION

**Common Name:** **METHANOL**  
**Synonyms:** Methyl Alcohol, Wood Alcohol  
**Catalog Number:** R6564, R5850  
**CAS #:** 6-7561  
**WARNING:** POISON, FLAMMABLE

### SECTION 2: HAZARDOUS INGREDIENTS

<u>Hazardous Components</u>	<u>CAS #</u>	<u>Chemical Family</u>	<u>Molecular Formula</u>	<u>Approximate Concentration</u>
Methanol	6-7561	Alcohol	CH <sub>3</sub> OH	100%

### SECTION 3: PHYSICAL DATA

<b>Appearance:</b> Clear, colorless liquid	<b>pH:</b> N/AV	<b>Vapor Density:</b> 1.11 (Air = 1)
<b>Boiling Point:</b> 64.5°C	<b>Solubility in Water:</b> Very	<b>Flash Point:</b> 15.5°C (Open cup)
<b>Melting Point:</b> -97.8°C	<b>Vapor Pressure:</b> N/AV	<b>Evaporation Rate:</b> N/AV
<b>Odor:</b> Alcohol	<b>Specific Gravity:</b> 0.792	

### SECTION 4: FIRE AND EXPLOSION HAZARD

**Flammable:** Yes: Flammable liquid.

**Flammable Limits:**

Upper: 36.5%      Lower: 6.0%

**Extinguish Media:**

Dry chemical, carbon dioxide, "alcohol" foam

**Special Hazards:**

Wear self-contained, positive-pressure breathing apparatus and full protective clothing.

**Unusual Fire and Explosion Hazards:**

Water spray may be ineffective on an extinguishing agent but water should be used to keep fire-exposed containers cool.

### SECTION 5: REACTIVITY DATA

Stable:       Unstable:

**Conditions to Avoid:**

Heat, sparks, open flame

**Materials to Avoid:**

- Water -
- Acids -
- Bases -
- Corrosives -
- Oxidizers -

Other: Heat, sparks, flame, chromic anhydride, iodine, ethyl alcohol, mercuric oxide, lead perchloric, potassium hydroxide, sodium hydroxide and chloroform, acetyl bromide, nitric acid, bromine, sodium hypochlorite, dichloromethane.

**Hazardous Decomposition Products:**

Toxic fumes of carbon monoxide and carbon dioxide.

SECTION 6: HEALTH HAZARD DATA

To the best of our knowledge, the chemical, physical, and toxicological properties of this mixture have not been thoroughly investigated. Presented below are specific data on each of the subcomponent ingredients:

<u>Hazardous Component</u>	<u>%</u>	<u>Threshold Limit Value</u>	<u>TXDS</u>
Methanol	100%	200 ppm; 260 mg/m <sup>3</sup>	SCU-MUS LD50: 9800 mg/kg

Effects of Overexposure (Acute and Chronic):  
Cannot be made nonpoisonous. Harmful if inhaled.

Carcinogenicity: These products do not contain any carcinogens at 0.1% or greater.

First Aid Procedure:

- Skin Contact: Wash with soap and copious amounts of water.
- Eye Contact: Flush eyes with water for 15 minutes. Seek medical attention.
- Inhalation: Remove to fresh air. If not breathing, give artificial respiration; if breathing is difficult, give oxygen; seek medical attention.
- Ingestion: Induce vomiting until vomit fluid is clear. Seek medical attention immediately.

In all cases of overexposure, seek medical attention immediately.  
Wash contaminated clothing before reuse.

SECTION 7: SPILL OR LEAK PROCEDURES AND DISPOSAL

Steps to be taken if Material is Released or Spilled:

Ventilate area. Remove all sources of ignition. Absorb on sand, earth or vermiculite. Carefully sweep up and remove.

Waste Disposal Method:

Atomize in a furnace. Observe all local, provincial, state, and federal regulations.

SECTION 8: SPECIAL PROTECTION INFORMATION

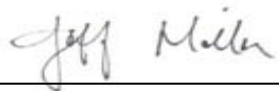
- Provide adequate general mechanical and local exhaust ventilation.
- Avoid prolonged or repeated inhalation of vapor.
- Protect eyes, skin, and clothing with safety goggles and rubber gloves.
- Wash thoroughly after handling.

SECTION 9: SPECIAL HANDLING AND STORAGE PRECAUTIONS

Keep in tightly closed container. Store in cool, dry area away from heat, sparks, flame.

SECTION 10: MSDS PREPARATION AND INFORMATION

Revised History: 8/89, 9/92  
 Current Revision: 1/08  
 Revised By: Jeff Miller



Authorized Signature: \_\_\_\_\_

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