Section I - Product Identification

Product: This is a solution of Giemsa stain and methanol in glycerin

Intended Uses: A staining solution used to visualize parasites in blood films.

Uses advised against: For laboratory use only. Methyl alcohol is toxic and can not be made non-toxic.

Manufacturer Identification
Medical Chemical Corp.
19430 Van Ness Ave.
Torrance, CA 90501

Customer Service: Phone (310)787-6800
Email. Christinaavena@med-chem.com
FAX (310)787-4464

Emergency Telephone Number
CHEMTREC Emergency Response Telephone Number: (800)424-9300. Note: The CHEMTREC phone number is only for emergencies involving spills, leaks, fire, exposure or accident. Please direct all other inquiries to our customer service phone number.

Section II - Hazard Identification

This item is considered hazardous by 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquid: Category 2 (H225). Highly flammable liquid and vapor.

Eye damage/eye irritation: Category 2 (H319). Causes serious eye irritation.

Acute toxicity (Oral): Category 4 (H301). Toxic if swallowed.

Acute toxicity (Inhalation): Category 4 (H331). Toxic if inhaled.

Acute toxicity (Dermal): Category 4 (H311). Toxic in contact with skin.

Specific target organ Toxicity: single exposure: Category 1 (H370). Causes damage to organs.

Signal word: Danger

Hazard statements: Highly flammable liquid and vapor. Keep away from heat, sparks, open flames and hot surfaces. No smoking. Keep container tightly closed. Use only non-sparking tools. Take precautions against static discharge. Wear protective clothes and eye protection. In case of skin contact immediately remove all contaminated clothing. Rinse with water or shower. In case of fire, use fire extinguishers approved for alcohol fires.

Precautionary statements
P210 Keep away from heat, sparks, open flames and hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting equipment.
P242 Use only non-sparking tools.
P243 Take precautions against static discharge.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 Wash thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective clothes and eye protection.

Safety Ratings

Health: Hazardous Flammability: Highly Flammable Reactivity: None Contact: Hazardous

Recommended safety equipment: safety goggles, lab coat and proper gloves

NFPA Ratings

Health = 2 Flammability = 4 Reactivity = 0

Potential Health Effects

Exposure to excessive vapor causes eye irritation, headache, fatigue and drowsiness. High concentrations can produce central nervous system depression and optic nerve damage. 50,000 ppm will
probably cause death in 1 to 2 hrs. Can be absorbed through skin. Swallowing may cause death or eye damage.

**Inhalation:** methyl alcohol is absorbed through the mucous membranes and will produce irritation as well as the same effects as ingestion.

**Ingestion:** Ingestion will produce CNS disturbance, dizziness, photophobia, headache, stupor, coma and death. Death has resulted from ingestion of as little as 30 ml of methanol.

**Skin contact:** Alcohols are absorbed through the skin. Repeated contact causes defatting of the skin with resultant irritation and flaking.

**Eye contact:** May be irritating.

**Chronic Exposure:** Unknown.

**Aggravation of preexisting conditions:** Impaired kidney and liver function may be aggravated by exposure to alcohols. Preexisting eye, skin, and respiratory conditions may also be aggravated. methyl alcohol has shown genetic toxicity in some animals.

### Section III - Composition/Information on Components

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS #</th>
<th>EC List Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl alcohol</td>
<td>67-56-1</td>
<td>200-659-6</td>
<td>38.6% w/w</td>
</tr>
<tr>
<td>Glycerin</td>
<td>56-81-5</td>
<td>200-289-5</td>
<td>60.7% w/w</td>
</tr>
<tr>
<td>Giemsa stain</td>
<td>51811-82-6</td>
<td>257-82-6</td>
<td>0.8% w/w</td>
</tr>
</tbody>
</table>

### Section IV - First Aid Measures

**General Advice:** Contact a doctor if symptoms persist

**Inhalation:** Remove from source of exposure and get medical attention for any breathing difficulty.

**Ingestion:** Do not induce vomiting. Aspiration of alcohol into the lungs may produce death. Get immediate medical attention even if symptoms improve.

**Skin Contact:** In case of skin contact, remove contaminated clothing and flush with water. Wash affected area with soap and water. Get medical advice if irritation develops.

**Eye Contact:** In case of eye contact, flush with water for at least 15 minutes and get medical attention.

### Section V - Fire Fighting Measures

**Fire Extinguishing Media:** Alcohol foam, carbon dioxide or dry chemical. Water is ineffective against alcohol fires but may be used to cool adjacent containers.

**Flash point:** 12 °C (54 °F) TCC

**Flammable Limits:** LEL 6% UEL 36.5%

**Specific Hazards:** Risk of vapor traveling to source of ignition and flashing back. Risk of exploding containers when heated. Vapor in air may form explosion risk.

**Special information:** Pyrolysis will release toxic carbon monoxide, formaldehyde and methyl alcohol.

**Special protective gear and precautions:** Self contained breathing apparatus and protective gear recommended.

### Section VI - Accidental Release Measures

Use personal protective gear, remove all sources of ignition, absorb with a suitable absorbent and dispose. Take precautions against static ignition. Should not be released into the environment.

### Section VII - Handling and Storage

P403+P233+P102; Store in a well-ventilated place. Keep container tightly closed. Store away from open flames or other sources of ignition. Keep out of reach of children.

### Section VIII - Exposure Control/Personal Protection

<table>
<thead>
<tr>
<th>Component</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
</table>

SDS for Giemsa stain, Page 2 of 4
Glycerin 10 mg/m³ (Mist) 15 mg/m³ (Mist) No Data
Methyl Alcohol 200 ppm (skin) 200 ppm (skin) 6000 ppm
Giemsa stain Not regulated Not regulated Not regulated

**Legend**

ACGIH: American Conference of Governmental Industrial Hygienists.
OSHA: Occupational Safety and Health Administration.
NIOSH: National Institute for Occupational Safety and Health.
IDLH: Immediately dangerous to life or health.

Ventilation System: Local exhaust such as explosion proof chemical fume hoods are recommended. When required, Refer to the ACGIH document, “Industrial Ventilation, a Manual of Recommended Practices” for details about ventilation.

Personal Respirator: Usually not required. In case of emergency, or when exposure levels are unknown, use a positive pressure, full face piece, air supplied respirator.

Skin protection: Protective gloves are recommended as part of good laboratory practice.

Eye Protection: Laboratory safety goggles or similar products are not required but recommended as part of good laboratory practice.

**Section IX - Physical and Chemical Properties**

- **Boiling Point**: 172 °F (78 °C)
- **Density**: 1.07 g/ml @ 22.5 °C
- **Vapor pressure (mm Hg)**: 128 hPa @ 20 °C
- **Evaporation Rate (Ethanol = 1)**: 1
- **Vapor Density (air = 1)**: 1.1
- **Solubility**: Infinitely miscible with water
- **Appearance and Odor**: A clear, blue liquid with the characteristic odor of methanol.

**Section X - Stability and Reactivity**

- **Stability**: Stable under normal conditions.
- **Hazardous Decomposition Products**: Nothing unusual.
- **Hazardous polymerization**: Will not occur.
- **Incompatibilities**: Oxidizers.
- **Conditions to avoid**: heat, flame and sources of ignition.

**Section XI - Toxicological Information**

<table>
<thead>
<tr>
<th>Component</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Alcohol</td>
<td>5628 mg/kg (Rat)</td>
<td>15,800 mg/kg (Rabbit)</td>
<td>64,000 ppm/4h (Rat)</td>
</tr>
<tr>
<td>Glycerin</td>
<td>4090 mg/kg (Mouse)</td>
<td>10000 mg/kg (Rabbit)</td>
<td>&gt;570 mg/kg (Rat) mist</td>
</tr>
<tr>
<td>Giemsa stain</td>
<td>No Data</td>
<td>No Data</td>
<td>No Data</td>
</tr>
</tbody>
</table>

**Cancer lists**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Known Carcinogenicity?</th>
<th>NTP?</th>
<th>Anticipated?</th>
<th>IARC Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerin</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>None</td>
</tr>
<tr>
<td>Methyl Alcohol</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>None</td>
</tr>
<tr>
<td>Giemsa stain</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>None</td>
</tr>
</tbody>
</table>

**Section XII - Ecological Information**

Aliphatic alcohols evaporate quickly and are not expected to bioaccumulate. The material is removed from the air by dry and liquid adsorption. The half-life for ethanol in the atmosphere is one to ten days.

**Environmental Fate**: Biodegradable
**Soil Mobility**: Unknown
**Environmental Toxicity**: Low.
### Component Summary

<table>
<thead>
<tr>
<th>Component</th>
<th>Freshwater Fish</th>
<th>Water Flea</th>
<th>Freshwater algae</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Alcohol</td>
<td>LC50 &gt;100 mg/l 96 h</td>
<td>EC50 &gt;1000 mg/l 48 h</td>
<td>EC50 = 22 g/l 96 h</td>
</tr>
<tr>
<td>Glycerin</td>
<td>59 ppm 96 h</td>
<td>No Data</td>
<td>No Data</td>
</tr>
<tr>
<td>Giemsa stain</td>
<td>No Data</td>
<td>No Data</td>
<td>No Data</td>
</tr>
</tbody>
</table>

### Section XIII - Disposal Considerations

Incineration at a licensed chemical disposal facility is the preferred disposal method. Local governments often restrict the amounts of methanol and other flammable liquids that may be flushed down the drain. The usual rule is that the effluent exiting the building can’t be flammable. Dispose of contents and container in accord with all applicable regulations.

### Section XIV - Transportation Information

DOT Shipping name: Methyl alcohol Hazard Class: 3 Packaging Group II
DOT Hazard Label: Flammable liquid DOT Identification Number: UN1230

Bottles smaller than 32 Fl. Oz. are eligible to be shipped under limited quantity exemptions [49 CFR section 173.150(b)(2) and 173.150(c)].

### Section XV - Regulatory Information

#### Chemical Inventory Status

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>TSCA</th>
<th>EC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl alcohol</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Glycerin</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Giemsa stain</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

#### Federal and State Regulations

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>SARA 302 RQ</th>
<th>SARA 313 TPQ</th>
<th>SARA 313 List</th>
<th>RCRA 261.33</th>
<th>TSCA 8(D)</th>
<th>Ca. Prop 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl alcohol</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>U154</td>
<td>No</td>
</tr>
<tr>
<td>Glycerin</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Giemsa stain</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Chemical Weapons Convention: No TSCA 12(b): No CDTA: Yes

SARA 311/312: Acute: Yes Chronic: No Fire: Yes Pressure: No Reactivity: No

This product contains methyl alcohol which is known to the state of California to cause birth defects or other reproductive harm. For more information go to www.P65warnings.ca.gov.

### Section XVI - Other Information

This information is believed to be correct at the time of publication but is not guaranteed as such, nor does it purport to be all inclusive. Medical Chemical Corp. assumes no liability for the accuracy or completeness of the information. The user assumes all responsibility for compliance with federal, state and local laws.

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