PART #S’10145,10146,10144,10111
SOLUTION 1 GRAM STAIN STARTER KIT - NEAT STAIN – REFILL KIT - GPAk
MATERIAL SAFETY DATA SHEET

Section I: IDENTIFICATION

Product Name: Gram Stain Crystal Violet
Date Prepared: 01-17-02
Item Number: 501
Emergency Phone: 828 258-1482

Section II: HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Component(s)</th>
<th>CAS#</th>
<th>OHSA PEL, ACGIH TLV/STEL(PPM)</th>
<th>NFPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phenol</td>
<td>&lt; 1%</td>
<td>108-95-2</td>
<td></td>
</tr>
<tr>
<td>Methanol</td>
<td>&lt; 1%</td>
<td>67-56-1</td>
<td></td>
</tr>
<tr>
<td>Ethanol</td>
<td>~11%</td>
<td>64-17-5 1000</td>
<td></td>
</tr>
</tbody>
</table>

Section III: PHYSICAL DATA

Boiling Point: ~200°F
Specific Gravity (H₂O = 1): ~1
Vapor Pressure mm Hg/20°C: 79
Percent Volatile by Vol: 10%
Vapor Density (Air 1:1): >1
Evaporation Rate (ether = 1): >1
Solubility in H₂O: Complete
Appearance & Odor: Purple liquid, phenolic odor

Section IV: FIRE/EXPLOSION HAZARD

Flash Point: 62°F
Flammable Limits: LEL, NA UEL, NA
Extinguishing Media: Water spray, dry chemical, CO₂ and foam for alcohol
Special Fire Fighting Procedures: Wear protective clothing with NIOSH approved breathing apparatus.
Products of combustion may be harmful in a fire situation. Do not use direct water stream.
Unusual Fire & Explosion Hazards: Eliminate potential sources of ignition.

Section V: REACTIVITY

Stability: Stable
Material to Avoid: Strong oxidizers, chromic anhydride, perchloric acids etc.
Hazardous Decomposition or Byproducts: Oxides of carbon
Hazardous Polymerization: Does not occur
Conditions to Avoid: Excessive heat

Section VI: HEALTH HAZARDS

Routes of Entry: Inhalation, Skin and Ingestion
Acute: Vapors may cause eyes, skin and respiratory irritation, drowsiness, nausea, headache and vomiting.
Chronic: May cause liver, heart and kidney damage. May cause gastrointestinal disturbances and convulsions.
Carcinogenicity: Not classified as a human carcinogen.
Signs/Symptoms of Exposure: Vision blurring, drowsiness and headache.

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828 685.3569

PART # 500 (KIT)
Section VI: HEALTH HAZARDS

Emergency First Aid:

Skin: Remove contaminated clothing. Wash affected area with soap and water.

Eyes: Thoroughly flush eyes with water. Contact a physician if irritation persist.

Ingestion: Rinse mouth thoroughly with water, provided person is conscious and contact a physician.

Inhalation: Remove person to fresh air. If not breathing, give artificial respiration and contact physician.

Section VII: SAFE HANDLING

Chemical Release or Spill: Eliminate source of ignition in the vicinity of the spill or released vapor. Isolate the spill area with sand, or other absorbent material. Place all contaminated material in closed container for disposal.

Waste Disposal Method: All liquid and or contaminated material should be disposed of in DOT approved waste containers. Incineration for liquids is the suggested method of disposal. Comply with all Federal, State and Local regulations for disposal.

Precautions for Handling and Storing: Use precautions for combustible liquids. Avoid excessive heat and sources of ignition. Use in ventilated area.

Section VIII: CONTROL MEASURES

Respiratory Protection: Not normally required. If used in a poorly ventilated area use under an approved fume hood or NIOSH approved respirator.

Ventilation: Mechanical exhaust is sufficient.

Protective Gloves: Chemical resistant Eye Protection: Safety glasses
Other Protective Clothing or Equipment: Normal laboratory apparel suggested by Good Laboratory Practices

Work/Hygienic Practices: Wash thoroughly with soap and water after handling.

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. KACEY INC shall not be held liable for any damage resulting from handling or contact with this product.

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