Section I - Product Identification
A solution of acridine orange in water.

Section II - Hazards Identification
Overview: May be harmful if swallowed. May be irritating to skin eyes and respiratory tract.

<table>
<thead>
<tr>
<th>Safety Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health: Slight</td>
</tr>
</tbody>
</table>

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

Storage: General storage

NFPA Ratings
Health = 1  Flammability = 0  Reactivity = 0

Potential Health Effects
The toxicology of this compound have not been completely examined. It is presumed that the toxicity of this item is similar to that of other acridine dyes.
Inhalation: Not likely to be a problem.
Ingestion: While the toxicity of this compound is low, large doses may cause nausea, vomiting, diarrhea, etc.
Skin contact: Not normally a problem but will stain skin.
Eye contact: May be irritating
Chronic Exposure: Unknown
Aggravation of preexisting conditions: Unknown

Section III - Composition/Information on Components

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS#</th>
<th>OSHA Pel</th>
<th>ACGIH TLV</th>
<th>Other Limits</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acridine orange</td>
<td>65-61-2</td>
<td>----------</td>
<td>-----------</td>
<td>--------------</td>
<td>-------</td>
</tr>
</tbody>
</table>

Section IV - First Aid Measures

Inhalation: Not likely to happen.
Ingestion: If the victim is conscious, induce vomiting. Never give anything by mouth to an unconscious person.
Skin Contact: Wash affected area with soap and water. Get medical advice if irritation develops.
Eye Contact: Rinse thoroughly with running water. Get medical advice if irritation develops.
Section V - Fire Fighting Measures

_Flash point:_ Not applicable.

_Fire:_ Not normally a fire Hazard.

_Explosion:_ Not Normally an explosion hazards.

_Fire Extinguishing Media:_ Any means suitable for surrounding fire.

_Special information:_ Pyrolysis will release corrosive oxides.

Section VI - Accidental Release Measures

Absorb with a suitable absorbent (such as paper towels) and store in a suitable container for disposal.

Section VII - Handling and Storage

Store in a closed container, protected from freezing.

Section VIII - Exposure Control/Personal Protection

_Airborne Exposure Limits:_ See section III.

_Ventilation System:_ Usually not required. When required, Refer to the ACGIH document, “Industrial Ventilation, a Manual of Recommended Practices” for details about ventilation.

_Personal Respirator:_ Usually not required.

_Skin protection:_ Protective gloves are not required but 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:_ 100 °C
- _Vapor pressure (mm Hg):_ 18 @ 20 °C
- _Vapor Density (air = 1):_ 0.6
- _Appearance and Odor:_ A clear orangish liquid.
- _Density:_ About 1.0 g/ml
- _Evaporation Rate (water = 1):_ 1
- _Solubility:_ Infinitely miscible with water

Section X - Stability and Reactivity

_Stability:_ Freezes at low temperature.

_Hazardous Decomposition Products:_ Nothing unusual.

_Hazardous polymerization:_ Will not occur.

_Incompatibilities:_ Nothing unusual.

_Conditions to avoid:_ Excessive cold/heat and light.

Section XI - Toxicological Information

None relating to normal exposure.

_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>Acridine Orange</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>none</td>
</tr>
</tbody>
</table>

Section XII - Ecological Information

_Environmental Fate:_ Biodegradable

_Environmental Toxicity:_ None

Section XIII - Disposal Considerations

Generally not restricted but local governments may restrict the amounts of dyes that may be flushed down drain. Insure compliance with all government regulation.
Section XIV - Transportation Information
Not regulated.

Section XV - Regulatory Information

Chemical Inventory Status

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>TSCA</th>
<th>EC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acridine Orange</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Federal, State and International Regulations

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>SARA 302</th>
<th>SARA 313</th>
<th>RCRA</th>
<th>TSCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acridine Orange</td>
<td>RQ No</td>
<td>TPQ No</td>
<td>List No</td>
<td>Category No</td>
</tr>
<tr>
<td>Chemical Weapons Convention: No</td>
<td>TSCA 12(b): No</td>
<td>CDTA: No</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SARA 311/312: Acute: Yes, Chronic: No

Section XVI - Other Information

This information is believed to be correct but is not warranted as such, nor does it purport to be all inclusive.

Revision Date: Nov. 2, 2017