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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 I - Product Identification

An aqueous solution of acridine orange, glycerin, phenol and reagent alcohol.

### Section II - Hazards Identification

Danger: 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.

#### Safety Ratings

*Health:* Hazardous    *Flammability:* Highly flammable liquid and vapor    *Reactivity:* Slight    *Contact:* Slight  
Recommended safety equipment: safety goggles, lab coat and proper gloves

*Storage:* Keep cool, away from sources of ignition in a well ventilated area.

#### NFPA Ratings

Health = 2    Flammability = 3    Reactivity = 1



#### 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 other solutions of phenol and aliphatic alcohols.

*Inhalation:* Alcohols are absorbed through the mucous membranes and will produce irritation as well as the same effects as ingestion.

*Ingestion:* Inhalation will produce CNS disturbance, dizziness, photophobia, headache, stupor, coma and death. Phenol is very toxic.

*Skin contact:* Alcohols and phenol are absorbed through the skin. Repeated contact causes defatting of the skin with resultant irritation and flaking. Contact with phenol can cause chemical burns.

*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. Methanol has shown genetic toxicity in some animals.

### Section III - Composition/Information on Components

Ingredients	CAS#	OSHA PeI	ACGIH TLV	Other Limits	%
Glycerin	56-81-5	5 mg/m <sup>3</sup> (mist)	TWA 10 mg/m <sup>3</sup>		25 % v/v
Ethanol	64-17-5	1000 ppm (TWA)	1000 ppm (TWA)		22.5% v/v
Phenol	108-95-2	5 ppm (Skin) TWA	5 ppm (Skin) TWA		5% w/v
Isopropanol	67-63-0	400 ppm (TWA)	400 ppm (STEL)		1.25% v/v
Methyl alcohol	67-56-1	200 ppm (TWA)	200 ppm (TWA)		1.25% v/v
Acridine orange	65-61-2	-----	-----		0.1% w/v

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## Section IV - First Aid Measures

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

*Ingestion:* Do not induce vomiting. 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.

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## Section V - Fire Fighting Measures

*Flash point:* 25°C (77°F) TCC

*Flammable Limits (for ethanol):* LEL 3% UEL 19%

*Explosion:* Not normally an explosion hazard.

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

*Special information:* Pyrolysis will release phenol and toxic oxides such as carbon monoxide.

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## Section VI - Accidental Release Measures

Remove all sources of ignition, absorb with a suitable absorbent (such as paper towels) and dispose.

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## Section VII - Handling and Storage

Store in a cool, well ventilated place. Store in a closed container, away from open flames or other sources of ignition.

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## 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. 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 recommended as part of good laboratory practice.

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## Section IX - Physical and Chemical Properties

*Boiling Point:* 100°C

*Vapor pressure (mm Hg):* Unknown

*Vapor Density (air = 1):* 3.2

*Appearance and Odor:* A reddish purple solution with the characteristic odor of phenol.

*Density:* 1.1 g/ml

*Evaporation Rate (Water = 1):* 1

*Solubility:* Infinitely miscible with water

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## Section X - Stability and Reactivity

*Stability:* Freezes at very low temperature.

*Hazardous Decomposition Products:* Nothing unusual.

*Hazardous polymerization:* Will not occur.

*Incompatibilities:* Oxidizers.

*Conditions to avoid:* heat, flame and sources of ignition.

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## Section XI - Toxicological Information

Phenol is toxic by absorption, ingestion or inhalation. Chronic consumption of ethanol is believed to be linked to liver disease, cancer and birth defects.

## Cancer lists

<u>Ingredient</u>	<u>Known Carcinogenicity?</u>	<u>NTP?</u>	<u>Anticipated?</u>	<u>IARC Category</u>
Acridine Orange	No	No	No	3
Ethanol	No	No	No	None
Glycerin	No	No	No	None
Isopropanol	No	No	No	3
Methanol	No	No	No	None
Phenol	No	No	No	3

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## Section XII - Ecological Information

*Environmental Fate:* Reagent alcohol is biodegradable. Basic fuchsin and phenol are probably not.

*Environmental Toxicity:* Unknown, but expected to be toxic to aquatic organisms.

Ethanol evaporates quickly and is not expected to bioaccumulate. The half-life for ethanol in the atmosphere is one to ten days.

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## Section XIII - Disposal Considerations

Local governments often restrict the amounts of alcohol and/or phenol that may be flushed down drain. Dispose of contents and container in accord with all applicable regulation

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## Section XIV - Transportation information

*DOT Shipping name:* Denatured alcohol

*Hazard Class:* 3     *Packaging Group:* III

*DOT Hazard Label:* Flammable liquid

*DOT Identification Number:* UN 1170

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

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## Section XV - Regulatory Information

### Chemical Inventory Status

<u>Ingredient</u>	<u>TSCA</u>	<u>EC</u>
Acridine Orange	Yes	Yes
Ethanol	Yes	Yes
Glycerine	Yes	Yes
Isopropanol	Yes	Yes
Methanol	Yes	Yes
Phenol	Yes	Yes

### Federal, State and International Regulations

<u>Ingredient</u>	<u>SARA 302</u>		<u>SARA 313</u>		<u>RCRA</u>	<u>TSCA</u>	<u>Ca. Prop 65</u>
	<u>RQ</u>	<u>TPQ</u>	<u>List</u>	<u>Category</u>	<u>261.33</u>	<u>8(D)</u>	
Acridine Orange	No	No	No	No	No	No	No
Ethanol	No	No	No	No	No	No	No
Glycerine	No	No	Yes	No	No	No	No
Isopropanol	No	No	Yes	No	No	No	No
Methanol	No	No	Yes	No	U154	No	Yes
Phenol	1000	500	Yes	No	U188	No	No

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

SARA 311/312: Acute: Yes, Chronic: Yes, Flammable: Yes

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## 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.

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