MEDICAL CHEMICAL CORPORATION
SINCE 1954

SDS for Auramine O Stain
Catalog # 418X

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Section I - Product Identification

Product: This product is an auramine O stain consisting of auramine O, phenol, glycerine and isopropyl alcohol in water.

Intended Uses: Auramine O staining solution is used for demonstrating acid fastness in acid fast bacteria.

Uses advised against: This product should be used by trained laboratory professionals.

Country of origin: United States.

Manufacturer Identification

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

Customer Service: Phone (310)787-6800
Email. Customerservice@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 3 (H226). Flammable liquid and vapor.
Eye damage/eye Irritation: Category 2A (H319). Causes serious eye irritation.
Acute toxicity (Oral): Category 4 (H302). Harmful if swallowed.
Acute toxicity (Inhalation): Category 4 (H333). May be harmful if inhaled.
Acute toxicity (Dermal): Category 4 (H312). Harmful in contact with skin.
Skin corrosion: 1B (H315). Causes skin irritation
Carcinogenicity: Category 2 (H351). Suspected of causing cancer.
Germ cell mutagenicity: Category 2 (H341). Suspected of causing genetic defects.

Signal word: Warning

Hazard statements: 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. Phenol and methanol are toxic by inhalation, absorption or ingestion. Suspected of causing genetic defects.

Precautionary statements

P102: Keep out of reach of children.
P260: Do not breathe dust/fume/gas/mist/vapors/spray.
P262: Do not get in eyes, on skin, or on clothing
P264:Wash thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P301+P317: IF SWALLOWED: Get medical help.
P302+P352: IF ON SKIN: wash with plenty of water.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P337+P317: If eye irritation persists: Get medical help.
P361+P364: Take off immediately all contaminated clothing and wash it before reuse.
P405: Store locked up.

Safety Ratings

Health: Hazardous *Flammability*: Flammable *Reactivity*: None *Contact*: Slight
Recommended safety equipment: safety goggles, lab coat and proper gloves

NFPA Ratings

Health = 2. Can cause temporary injury or residual injury.
Flammability = 2. Must be heated or have high ambient temperature to burn.
Reactivity = 0. Stable.

Potential Health Effects

It is presumed that the toxicity of this item is similar to that of other solutions of diphenylmethane dyes. Auramine O is a suspected carcinogen. Phenol will burn eyes and skin. The analgesic action may cause loss of pain sensation. Phenol is readily absorbed through skin, causing increased heart rate, convulsions, and death. Gastrointestinal effects include: nausea, pain, bloody vomitus and diarrhea.

Inhalation: Alcohols are absorbed through the mucous membranes and will produce irritation as well as the same effects as ingestion. Phenol is toxic by inhalation.

Ingestion: Ingestion will produce CNS disturbance, dizziness, photophobia, headache, stupor, coma and death. Phenol is very toxic: Oral lethal dose is estimated at 50-500 mg/kg. Ingestion of 1 gram has been fatal.

Skin contact: Alcohols are absorbed through the skin. Repeated contact causes defatting of the skin with resultant irritation and flaking. Phenol is corrosive to skin.

Eye contact: May be irritating. Phenol can cause severe eye damage

Chronic Exposure: Repeated contact can cause chronic poisoning with kidney and liver damage.

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.

Section III - Composition/Information on Components

Ingredients	CAS#	EC List Number	%
Isopropanol	67-63-0	200-661-7	<10% w/w
Glycerine	56-81-5	200-289-5	<15% w/w
Phenol	108-95-2	203-632-7	<3% w/w
Auramine O	2465-27-2	219-567-2	<0.1% w/w

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: Get immediate medical attention. Do not induce vomiting. If advice from a physician is not readily available, and the victim is conscious and not convulsing, rinse their mouth with water. Give the victim a glass of activated charcoal slurry in water or, if this is not available, a glass of milk, or beaten egg whites. Assure that the victim's airway is open and lay the victim on their side with the head lower than the body.

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. Phenol causes skin lesions that are slow to heal.

Eye Contact: First check the victim for contact lenses and remove if present. Flush victim's eyes with water or normal saline solution for 20 to 30 minutes while simultaneously calling a hospital or poison control center. Do not put any ointments, oils, or medication in the victim's eyes without specific instructions from a physician. Immediately transport the victim after flushing eyes to a hospital even if no symptoms develop.

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.

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. Heat will release toxic phenol vapor.

Special information: Pyrolysis will release toxic carbon monoxide and phenol vapors.

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

P102+P233+P403+P405; Store in a well-ventilated place. Keep container tightly closed. Store away from open flames or other sources of ignition. Keep out of the reach of children. Store locked up.

Section VIII - Exposure Control/Personal Protection

Component	ACGIH TLV	OSHA PEL	NIOSH	NIOSH IDLH
Glycerine	10 mg/m^3 TWA (mist)	15 mg/m^3 TWA (mist)	Not listed	Not Listed
Isopropanol	TWA: 200 ppm STEL: 400 ppm	TWA: 400 ppm	TWA 400 ppm	2000 ppm
Phenol	5 ppm (TWA)	19 mg/m^3 (TWA)	5 ppm (TWA)	250 ppm
Auramine O	Not listed	Not listed	Not listed	Not listed

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 required as part of good laboratory practice.

Eye Protection: Laboratory safety goggles or similar products are required as part of good laboratory practice.

Section IX - Physical and Chemical Properties

Appearance and Odor: An orange liquid with a sickening sweet smell (phenol).

Flash point: 60 °C (140 °F) TCC
Flammable Limits (for isopropanol): LEL 2% UEL 12%

Autoignition temperature: No data
Boiling point range: No data
Density: 1.03 g/ml @ 20 °C
Vapor pressure (mm Hg): No data
Melting point: No data
Odor threshold: No data
Vapor Density (air = 1): No data
Viscosity: No data

*Boiling Poin*t: No data
Decomposition temperature: No data
pH: Not applicable
Evaporation Rate (Water = 1): 1
Partition coefficient: No data
Solubility: Miscible with water
Vapor pressure: No data
Volatile organic carbon (VOC): 98 g/l

Section X - Stability and Reactivity

Stability: Stable under normal conditions.

Hazardous Decomposition Products: Heating will release corrosive phenol vapors..

Hazardous polymerization: Will not occur.

Incompatibilities: Reacts with strong oxidizing reagents and many common organic chemicals.

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

Section XI - Toxicological Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Glycerine	12.6 g/kg (Rat)	10 g/kg (Rabbit)	(Mist) 570 mg/m^3 1 h (Rat)
Isopropanol	>4700 mg/kg (Rat)	13,000 mg/kg (Rabbit)	19,000 ppm/8h (Rat)

Phenol	317 mg/kg (Rat)	630 mg/kg (Rabbit)	900 mg/m^3/8h (Rat)
Auramine O	480 mg/kg (Mouse)	No data	No data

Cancer lists

Ingredient	*Known Carcinogenicity?*	*NTP?*	*Anticipated?*	*IARC Category*
Glycerine	No	No	No	None
Isopropanol	No	No	No	3
Phenol	No	No	No	None
Auramine O	No	No	yes	2B

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
Hazardous to the aquatic environment, long-term hazard: Category 3 (H412). Harmful to aquatic life with long lasting effects

For glycerine
Toxicity to freshwater fish (rainbow trout):LC50 = 54,000 mg/l, 96 h
Toxicity to invertebrates: No data
Toxicity to freshwater algae: No data

For Isopropanol
Toxicity to freshwater fish (blue gill):LC50 = 9640 mg/l, 96 h
Toxicity to invertebrates (water flea): EC50 = 1000 mg/l, 48 h
Toxicity to freshwater algae (Pseudokirchneriella subcapitata): EC50 = >1000 mg/l, 72 h

For Auramine O
Toxicity to freshwater fish (Japanese rice fish):LC50 = 3.2 mg/l, 96 h
Toxicity to invertebrates: No data
Toxicity to freshwater algae: No data

For phenol
Toxicity to freshwater fish (cutthroat trout):LC50 = 8.9 mg/l, 96 h
Toxicity to invertebrates (water flea): EC50 = 3.1 mg/l, 48 h
Toxicity to freshwater algae (pseudokirchneriella subcapitata): EC50 = 61 mg/l, 96 h

Section XIII - Disposal Considerations

Incineration at a licensed chemical disposal facility is the preferred disposal method. Local governments often restrict the amounts of alcohol and other flammable liquids that may be flushed down the drain. They also restrict the amount of phenol that may be introduced into the environment. Dispose of contents and container in accord with all federal, state and local regulations.

Section XIV - Transportation Information

Not regulated.

Section XV - Regulatory Information

Chemical Inventory Status

Ingredient	*TSCA*	*EC*
Glycerine	Yes	Yes
Isopropanol	Yes	Yes
Phenol	Yes	Yes
Auramine O	Yes	Yes

Federal and State Regulations

	SARA 302		SARA 313		RCRA	TSCA	
Ingredient	RQ	TPQ	List	Category	261.33	8(D)	Ca. Prop 65
Isopropanol	No	No	Yes	No	No	No	No
Glycerine	No	No	No	No	No	No	No
Phenol	500	500	No	Yes	No	No	No
Auramine O	No	No	No	No	No	No	Yes

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

SARA 311/312

Acute:	Yes
Chronic:	Yes
Fire:	Yes
Pressure:	No
Reactivity:	No

⚠ This product contains auramine O which is known to the state of California to cause cancer, 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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