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### Section I - Product Identification

Product: A solution of aluminum sulfate, acetic acid, propylene glycol and hematoxylin in water.

Intended Uses: An in-vitro diagnostic reagent intended to be used as a stain in cytology.

Uses advised against: For laboratory use only.

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 not considered hazardous by 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). May be harmful if swallowed. May cause skin irritation.

**Serious eye damage/eye irritation:** Category 2A (H319). Causes serious eye irritation.

**Acute toxicity (Oral):** Category 4 (H302). May be harmful if swallowed.

**Acute toxicity (Dermal):** Category 5 (H313). May be harmful in contact with skin.

**Sensitization (Skin):** Category 1 (H317). May cause an allergic skin reaction.

**Signal word:** Warning

#### Hazard statements

The toxicology of this compound have not been completely examined. It is Irritating to the eye, skin and respiratory system.

#### Precautionary statements

- P102 Keep out of reach of children.
- P220 Keep away from clothing and other combustible materials.
- P260 Do not breathe dust/fume/gas/mist/vapors/spray.
- P264 Wash thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P273 Avoid release to the environment.
- P281 Use personal protective equipment as required.

#### Safety Ratings

*Health:* Slightly hazardous *Flammability:* Slight *Reactivity:* None *Contact:* Slight  
*Recommended safety equipment:* Not normally required.

#### NFPA Ratings

Health = 1 Flammability = 0 Reactivity = None

#### Potential Health Effects

*Inhalation:* May be Irritating to respiratory tract.

*Ingestion:* While the toxicity of this compound is low, large doses may cause nausea, vomiting, diarrhea, etc

*Skin contact:* Causes skin irritation or aggravation of existing dermatitis. Causes skin to turn brown.

*Eye contact:* Causes serious eye irritation.

*Chronic Exposure:* Unknown.

*Aggravation of preexisting conditions:* Unknown.

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### Section III - Composition/Information on Components

Ingredient	CAS#	EC/List No.	% w/w
Propylene Glycol	57-55-6	200-338-0	25%
Aluminum Sulfate, Hydrated	7784-31-8	616-524-3	2%
Acetic Acid	64-19-7	200-580-7	2%
Hematoxylin	517-28-2	208-237-3	0.1% w/w

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### Section IV - First Aid Measures

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

*Ingestion:* Rinse mouth with water but do not induce vomiting. Get medical advise.

*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.

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### Section V - Fire Fighting Measures

*Flash point:* Not applicable.

*Flammable Limits:* Not applicable.

*Fire:* Not normally a fire hazard. May cause fire on contact with organic material.

*Explosion:* Not normally an explosion hazard.

*Fire Extinguishing Media:* Any means suitable for surrounding fire.

*Special information:* Nothing unusual.

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### Section VI - Accidental Release Measures

Absorb with a suitable absorbent and store in a suitable container for disposal.

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### Section VII - Handling and Storage

P403+P233+P102; Store in a well-ventilated place. Keep container tightly closed. Keep out of reach of children.

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### Section VIII - Exposure Control/Personal Protection

Component	ACGIH TLV	OSHA PEL	NIOSH	NIOSH IDLH
Propylene Glycol	No data	No data	No data	No data
Aluminum Sulfate, Hydrated	2 mg/m <sup>3</sup> TWA as Al	2 mg/m <sup>3</sup> TWA as Al	2 mg/m <sup>3</sup> TWA as Al	Not Regulated
Acetic Acid	25 mg/m <sup>3</sup> TWA	25 mg/m <sup>3</sup> TWA	25 mg/m <sup>3</sup> TWA	50 ppm
Hematoxylin	No data	No data	No data	No data

#### 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:* 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 required as part of good laboratory practice.

*Eye Protection:* Laboratory safety goggles or similar products are required.

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## Section IX - Physical and Chemical Properties

Appearance and Odor: A purple solution with a vinegar odor.

Flash point: Not applicable

Auto ignition temperature: Not applicable

Boiling point range: No data

Decomposition temperature: No data

Melting point: ~0 °C

pH: ~3

Vapor pressure (mm Hg): 18 @ 20 °C

Viscosity: No data

Flammable Limits: Not applicable.

Boiling Point: 102 °C

Density: 1.03 g/ml @ 22.5 °C

Evaporation Rate (Water = 1): 1

Partition coefficient (n-Octanol/Water): No data

Solubility: Miscible with water

Vapor density (air = 1): 0.6

Volatile organic carbon (VOC): ~20 g/l

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## Section X - Stability and Reactivity

Stability: Stable under normal conditions.

Hazardous Decomposition Products: The manufacturer is unaware of any.

Hazardous polymerization: Will not occur.

Incompatibilities: Nothing unusual.

Conditions to avoid: Excessive cold and heat.

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## Section XI - Toxicological Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Propylene Glycol	20,000 mg/kg (Rat)	20,000 mg/kg (Rabbit)	No Data
Aluminum Sulfate, Hydrated	9,000 mg/kg (Rat)	No Data	No Data
Acetic Acid	3.31 g/kg (Rat)	1.11 g/kg (Rabbit)	11.4 mg/l 4 h (Rat)
Hematoxylin	400 mg/kg (Rat)	No Data	No Data

### Cancer lists

Ingredient	Known Carcinogenicity?	NTP?	Anticipated?	IARC Category
Propylene Glycol	No	No	No	None
Aluminum Sulfate, Hydrated	No	No	No	None
Acetic Acid	No	No	No	None
Hematoxylin	No	No	No	None

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## Section XII - Ecological Information

This product is expected to bioaccumulate. The product does not contain endocrine disrupters, persistent organic pollutants or ozone depleters.

**Soil Mobility:** Unknown

**Environmental Fate:** Biodegradable

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

### For acetic acid

Toxicity to freshwater fish (rainbow trout): LC50 = >1000 mg/l, 96 h

Toxicity to invertebrates (water flea): EC50 = > 1000 mg/l, 48 h

Toxicity to freshwater algae (Skeletonema costatum): EC50 = 73 mg/l, 72 h

### For aluminum sulfate

Toxicity to fish (rainbow trout): 0.09 mg/l, 144 h

Toxicity to Crustacea (zebra mussel): 76 mg/l, 3 h

Toxicity to freshwater algae: No data

### For hematoxylin

Toxicity to fish: No data

Toxicity to invertebrates: No data

Toxicity to algae: No data

For propylene glycol

Toxicity to fish (rainbow trout): 40,600 mg/l, 96 h  
Toxicity to invertebrates (water flea): 18,000 mg/l, 48 h  
Toxicity to algae (green algae): 19,000 mg/l 18 h

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**Section XIII - Disposal Considerations**

Usually not restricted but local ordinances vary. Insure compliance with all federal, state and local government regulations

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**Section XIV - Transportation Information**

Not regulated by DOT or IATA.

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**Section XV - Regulatory Information**

**Chemical Inventory Status**

<u>Ingredient</u>	<u>TSCA</u>	<u>EC</u>
Propylene Glycol	Yes	Yes
Aluminum Sulfate, Hydrated	Yes	Yes
Hematoxylin	Yes	Yes
Acetic Acid	Yes	Yes

**Federal and state Regulations**

<u>Ingredient</u>	<u>SARA 302</u>		<u>SARA 313</u>		<u>RCRA</u>	<u>TSCA</u>	
	<u>RQ</u>	<u>TPQ</u>	<u>List</u>	<u>Category</u>	<u>261.33</u>	<u>8(D)</u>	<u>Ca. Prop 65</u>
Propylene Glycol	No	No	No	No	No	No	No
Aluminum Sulfate, Hydrated	No	No	No	No	No	No	No
Acetic Acid	No	No	No	No	No	No	No
Hematoxylin	No	No	No	No	No	No	No

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

SARA 311/312

Acute: No  
Chronic: No  
Fire: No  
Pressure: No

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**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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