

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Hematoxylin Solution (5%)

**SYNONYMS:** None

**PRODUCT CODES:** ES37223, Components of Stain Kits: ES4807, ES4802, ES4828

**MANUFACTURER:** Azer Scientific, Inc.

**ADDRESS:** 701 Hemlock Rd, Morgantown, PA 19543

**CHEMTREC PHONE:** 800-424-9300

**SUPPORT:** 610-524-5810

**FAX:** 610-901-3046

**PRODUCT USE:** Biological Stain

**PREPARED BY:** CB

### SECTION 1 NOTES:

## SECTION 2: HAZARDS IDENTIFICATION

**GHS CLASSIFICATION:** Flammable liquid Category 2; Eye Irritation Category 2A; Skin Irritation Category 2



**Signal Word:** Danger!

Hazard Phrases	
H225	Highly flammable liquid and vapor.
H319	Causes serious eye irritation.
H315	Causes skin irritation

Precautionary Phrases	
P210	Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P302+P350	IF ON SKIN: Gently wash with plenty of soap and 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+P313	If eye irritation persists: Get medical advice/attention.

### SECTION 2 NOTES:

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENT:</u>	<u>CAS NO.</u>	<u>% WT</u>
Ethanol	64-17-5	≤93
Isopropyl Alcohol	67-63-0	≤5
Hematoxylin	517-28-2	≤5

### SECTION 3 NOTES:

## SECTION 4: FIRST AID MEASURES

**EYES:** Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention if irritation persists.

**SKIN:** In case of contact, flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if irritation persists.

**INGESTION:** Call medical doctor or poison control center immediately. Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION:** Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if you feel unwell.

**SECTION 4 NOTES:**

**SECTION 5: FIRE-FIGHTING MEASURES**

**FLAMMABILITY OF THE PRODUCT:** Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.

**FLASH POINT:** 14°C (57°F) - Closed cup (Ethyl Alcohol)

**AUTOIGNITION TEMPERATURE:** 363°C (685.4°F) - (Ethyl Alcohol)

**NFPA HAZARD CLASSIFICATION**

**HEALTH:1    FLAMMABILITY: 3    REACTIVITY: 0**  
**OTHER:**

**HMIS HAZARD CLASSIFICATION**

**HEALTH:1    FLAMMABILITY: 3    REACTIVITY: 0**  
**PROTECTION: G**

**EXTINGUISHING MEDIA:** Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

**NOT SUITABLE:** Do not use water jet.

**SPECIAL FIRE FIGHTING PROCEDURES:** Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full-face piece operated in a positive pressure mode.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide, Carbon dioxide

**SECTION 5 NOTES:**

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**ACCIDENTAL RELEASE MEASURES:**

**Small spill and leak:** Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container.

**Large spill and leak:** Shut off all ignition sources. Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

**SECTION 6 NOTES:**

**SECTION 7: HANDLING AND STORAGE**

**HANDLING:** Do not get in eyes, on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate.

**STORAGE:** Store in original container, protected from direct sunlight. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Store at Room Temperature.

## SECTION 7 NOTES:

## SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

**ENGINEERING CONTROLS:** General mechanical ventilation or laboratory fume hood. Ensure that eyewash stations and quick drench showers are close to the workstation.

**RESPIRATORY PROTECTION:** Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**EYE PROTECTION:** Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. Recommended: splash goggles

**SKIN PROTECTION:** Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: lab coat

**HANDS:** Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Recommended: Neoprene

**WORK HYGIENIC PRACTICES:** Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

## EXPOSURE GUIDELINES:

### OSHA Permissible Exposure Limits (PELs):

Reagent	CAS#	OSHA PEL TWA	Note
Ethyl Alcohol	64-17-5	1000 ppm (1,900 mg/m <sup>3</sup> )	29 CFR 1910.1000 Table Z-1 Limits for Air Containments
Isopropyl Alcohol	67-63-0	400 ppm (980 mg/m <sup>3</sup> )	

### ACGIH Threshold Limit values (TLVs):

Reagent	CAS#	ACGIH PEL TWA	ACGIH STEL	Note
Ethyl Alcohol	64-17-5		1000 ppm	Upper respiratory tract irritation. Confirmed animal carcinogen with unknown relevance to humans
Isopropyl Alcohol	67-63-0	200 ppm	400 ppm	

## SECTION 8 NOTES:

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE:** Transparent red-brown

**ODOR:** Characteristic, alcohol-like

**PHYSICAL STATE:** liquid

**pH AS SUPPLIED:** Not available

**BOILING POINT:** Not available

**MELTING POINT:** Not available

**FREEZING POINT:** Not available

**VAPOR PRESSURE (mmHg):** Not available

**VAPOR DENSITY (AIR = 1):** Not available

**EVAPORATION RATE:** 0.36%

**SOLUBILITY IN WATER:** Soluble in water

**MOLECULAR WEIGHT:** Mixture

**VISCOSITY:** Not established

**SECTION 9 NOTES:**

**SECTION 10: STABILITY AND REACTIVITY**

**STABILITY:** Product is stable under normal conditions of use.

**CONDITIONS TO AVOID (STABILITY):** Excessive heat

**INCOMPATIBILITY (MATERIAL TO AVOID):** None known

**HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:** Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: oxides of carbon.

**HAZARDOUS POLYMERIZATION:** No hazardous polymerization

**CONDITIONS TO AVOID (POLYMERIZATION):** N/A

**SECTION 10 NOTES:**

**SECTION 11: TOXICOLOGICAL INFORMATION**

**ACUTE TOXICITY:**

Oral: Ethyl alcohol: LC50 (Oral, rat) = 7060 mg/kg BWT, LDlo (Oral, human) = 1400mg/kg BWT

Isopropyl alcohol: LD50 (oral, rat)= 5,045 mg/kg

Inhalation: Ethyl Alcohol: LC50 (Inhalation, rat) = 20,000 ppm, 10hrs

Isopropyl Alcohol: LC50 (Inhalation, rat) = 87.6 mg/k 8 hrs.

Dermal LD50: Isopropyl Alcohol: Rabbit LD50 =12,800 mg/kg

Skin corrosion/irritation: Ethyl Alcohol: Draize test, rabbit, skin: 20 mg/24H Moderate

Eyes: Ethyl alcohol: Draize test, rabbit, eye: 500 mg/24H Reaction - Mild Rabbit, eye: 500 mg Reaction - Severe

Isopropyl Alcohol: Mildly irritating to the eye at airborne concentrations of 400 ppm, unpleasant at 800 ppm.

Respiratory or skin sensitization: Isopropyl alcohol: Rabbit = Mild skin irritation

Germ cell mutagenicity: No data available

Carcinogenicity: (NTP, IARC, OSHA) No component of mixture is a known carcinogen.

Potential health effects

Inhalation: Harmful if inhaled. May cause dizziness, headache.

Ingestion: May cause nausea.

Skin: May be harmful if absorbed through skin.

Eyes: May be irritating to the eyes.

**SIGNS AND SYMPTOMS OF EXPOSURE:** Effects due to ingestion may include: Gastrointestinal disturbance, Headache, Nausea, Vomiting, Dizziness.

**ROUTES OF ENTRY:** Skin/eye contact, inhalation, and ingestion.

**TARGET ORGANS:** Unknown

**SECTION 11 NOTES:**

**SECTION 12: ECOLOGICAL INFORMATION**

**TOXICITY:**

**Acute fish Toxicity (Ethanol)**

LC50 Oncorhynchus mykiss (rainbow trout) >10,000 mg/l 96hr

LC50 Pimephales promelas (fathead minnow) >13,400 mg/l 96hr

**PERSISTANCE AND DEGRADABILITY:** Biodegradation is expected

**BIOACCUMULATIVE POTENTIAL:** Bioaccumulation is unlikely.

**MOBILITY IN SOIL:** No data available

**PBT and vPvB ASSESSMENT:** Not required.

**SECTION 12 NOTES:**

**SECTION 13: DISPOSAL CONSIDERATIONS**

**WASTE DISPOSAL METHOD:** Unused product: dispose as a regulated hazardous waste. Spent product or spill clean up-follow all provincial, local, state, and federal regulations.

**RCRA HAZARD CLASS:** Not classified

**SECTION 13 NOTES:**

**SECTION 14: TRANSPORT INFORMATION**

**U.S. DEPARTMENT OF TRANSPORTATION**

**UN No.** UN1170  
**Proper Shipping Name** Ethanol  
**Hazard Class** 3  
**Packing Group** II  
**Label Statement:** Flammable liquid

**TDG**

**UN No.** UN1170  
**Proper Shipping Name** Ethanol  
**Hazard Class** 3  
**Packing Group** III

**IATA**

**UN No.** UN1170  
**Proper Shipping Name** Ethanol  
**Hazard Class** 3  
**Packing Group** III

**IMDG/IMP**

**UN No.** UN1170  
**Proper Shipping Name** Ethanol  
**Hazard Class** 3  
**Packing Group** III

**SECTION 15: REGULATORY INFORMATION**

**United States**

**HCS Classification:** Flammable liquid, Highly toxic material, Irritating material

**U.S. Federal regulations:**

**TSCA 8(a) IUR:** Listed on inventory.

**United States inventory (TSCA 8b):** Listed on inventory.

**SARA 302/304/311/312 extremely hazardous substances:** No products were found.

**SARA 302/304 emergency planning and notification:** No products were found.

**SARA 302/304/311/312 hazardous chemicals:** No products were found.

**SARA 311/312 MSDS distribution - chemical inventory - hazard identification:**

Ethanol CAS#64-17-5 Acute Health Hazard; Chronic Health Hazard, Fire Hazard

**SARA 313 Form R - Reporting:** The following components are subject to reporting levels established by SARA Title III, Section 313: Ethyl Alcohol: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard

**DEA List I & II Chemicals**

**(Precursor Chemicals):** Not Listed

**CERCLA:** No products found

**RTK STATES:** Ethanol CAS#64-17-5 PA, NJ, MA, FL Isopropyl Alcohol CAS#67-63-0 NJ, PA, MA, RI

**California Prop. 65**

WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm:  
None

**CANADA**

**WHMIS (Canada):**

Class B-2: Flammable liquid  
Class D-1B: Material causing immediate and serious toxic effects (Toxic).  
Class D-2B: Material causing other toxic effects (Toxic).

**Canadian lists:**

**CEPA Toxic substances:** The following components are listed: None

**Canadian ARET:** None of the components are listed.

**Canadian NPRI:** The following components are listed:

**CEPA DSL / CEPA NDSL:**

All components are listed or exempted.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

**International regulations**

**International lists:**

**Australia inventory (AICS):** All components are listed or exempted.

**China inventory (IECSC):** All components are listed or exempted.

**Japan inventory:** All components are listed or exempted.

**Korea inventory:** All components are listed or exempted.

**New Zealand Inventory of Chemicals (NZIoC):** All components are listed or exempted.

**Philippines inventory (PICCS):** All components are listed or exempted.

SECTION 16: OTHER INFORMATION

**National Fire Protection Association (U.S.A.)**



**DISCLAIMER:** This Safety Data Sheet has been prepared in accordance with the Globally Harmonized System for the Classification and Labelling of Chemicals (GHS). To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries makes any warranty of merchantability or any other warranty, expressed or implied, which respect to such information, and we assume no liability resulting from its use. In no event shall Azer Scientific be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages resulting from use of or reliance upon this information.

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