

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Carbol Fuchsin Ziehl-Neelsen Stain

**SYNONYMS:** None

**PRODUCT CODES:** ES820, ES821, ES822, ES823

**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 3, Serious Eye Damage Category 1, Skin Corrosion/Irritation Category 2, Germ Cell Mutagenicity (Category 2), Carcinogenicity Category 2, Specific Target Organ Toxicity - Single Exposure Category 2, Acute Toxicity -Inhalation Vapor (Category 4)



**Signal Word:** Danger!

Hazard Phrases	
H226	Flammable liquid and vapor.
H314	Causes severe skin burns and eye damage.
H304	May be fatal if swallowed and enters airways.
H332	Harmful if inhaled.
H371	May cause damage to organs.
H351	Suspected of causing cancer.
H341	Suspected of causing genetic defects.

Precautionary Phrases	
P210	Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
P280	Wear protective gloves/ eye protection/ face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P307+P311	IF exposed: Call a POISON CENTER or doctor/ physician.

## SECTION 2 NOTES:

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<b>INGREDIENT:</b>	<b>CAS NO.</b>	<b>% WT</b>
Basic Fuchsin	569-61-9	<1
Phenol	108-95-2	~9
Ethanol	64.17-5	17
Methanol	67-56-1	<1

## 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 immediate medical attention.

**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 immediate medical attention.

**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. Get medical attention immediately.

**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 immediate medical attention.

## SECTION 4 NOTES:

## SECTION 5: FIRE-FIGHTING MEASURES

**FLAMMABILITY OF THE PRODUCT:** Flammable liquid

**FLASH POINT:** Not available

**AUTOIGNITION TEMPERATURE:** Not available

### NFPA HAZARD CLASSIFICATION

**HEALTH:3    FLAMMABILITY: 2    REACTIVITY: 0**  
**OTHER:**

### HMIS HAZARD CLASSIFICATION

**HEALTH:3    FLAMMABILITY: 2    REACTIVITY: 0**  
**PROTECTION:**

**EXTINGUISHING MEDIA:** Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

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

**SPECIAL FIRE FIGHTING PROCEDURES:** 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.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Oxides of carbon expected to be the primary combustion product. Additional decomposition compounds may include nitrogen oxides, sulfur oxides, halogenated compounds, metal oxide/oxides

## 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). Use spark-proof tools and explosion-proof equipment. 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 accordance with local regulations. Store in a segregated and approved area. Store in original container, protected from direct sunlight. Eliminate all ignition sources. Separate from oxidizing materials. 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 and use away from heat, sparks, open flame or any other ignition source. 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

**ENVIRONMENTAL EXPOSURE CONTROLS:** Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**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 Contaminants
Phenol	108-95-2	5 ppm Ceiling	
Methyl Alcohol	67-56-1	200ppm (260 mg/m <sup>3</sup> )	Absorbed through skin.

**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
Phenol	108-95-2	5 ppm		
Methyl Alcohol	67-56-1	200ppm (260 mg/m <sup>3</sup> )	250ppm (328 mg/m <sup>3</sup> )	Absorbed through skin.

**SECTION 8 NOTES:**
**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**APPEARANCE:** Reddish purple

**ODOR:** Sweet odor

**PHYSICAL STATE:** liquid

**pH AS SUPPLIED:** Not available

**BOILING POINT:** 210°F

**MELTING POINT:** Not available

**FREEZING POINT:** Not available

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

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

**EVAPORATION RATE:** Not available

**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):** Avoid heat, sparks, flames, and all other sources of ignition.

**INCOMPATIBILITY (MATERIAL TO AVOID):** Oxidizing agents, strong acids and bases.

**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 LD50: Phenol: Rabbit-420 mg/kg; Rat- 400-650 mg/kg; Mouse- 282-427 mg/kg

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

Methyl Alcohol: LD50 (oral, mouse) = 0.4 g/kg, LD50 (oral, rat) = 6.2-13 g/kg LD50 (oral, rabbit) = 14.4 g/kg

Inhalation LC50: Phenol: Rat-900 mg/m<sup>3</sup> for 8 h

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

Methyl Alcohol: LC50 (Inhalation, rat) = 128.2 mg/l 4 hrs; LC50 (Inhalation, rat) = 87.6 mg/l 6 hrs

Dermal LD50: Methyl Alcohol: Rabbit LD50 =17,100 mg/kg

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

#### Carcinogenicity

International Agency for Research on Cancer (IARC).

Listed: Ethanol CAS 64-17-5, Basic Fuchsin CAS 632-99-5

National Toxicology Program (NTP).

Listed: Ethanol CAS 64-17-5

Occupational Safety and Health Act (OSHA)

Listed: Ethanol CAS 64-17-5, Basic Fuchsin CAS 632-99-5

Specific target organ toxicity - single exposure (Globally Harmonized System): no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System): no data available

Aspiration hazard: no data available

Potential health effects

Inhalation Toxic if inhaled. Causes respiratory tract irritation.

Ingestion Toxic if swallowed.

Skin Toxic if absorbed through skin. Causes skin irritation.

Eyes Causes eye irritation.

Signs and Symptoms of Exposure:

Phenol is absorbed through intact skin and is highly toxic by ingestion, inhalation or contact. Gastrointestinal effects include: nausea, pain, bloody vomit and diarrhea.

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

**TARGET ORGANS:** Liver, Kidneys, Nerves, Central nervous system, Skin, Eyes, Cardiovascular system, Pancreas, Spleen.

**SIGNS AND SYMPTOMS OF EXPOSURE:** To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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

**TARGET ORGANS:** Liver, Kidney, Nerves, Heart

#### SECTION 11 NOTES:

#### SECTION 12: ECOLOGICAL INFORMATION

**TOXICITY:** No data available

**PERSISTENCE AND DEGRADABILITY:** Biodegradation is expected

**BIOACCUMULATIVE POTENTIAL:** Bioaccumulation is unlikely.

**MOBILITY IN SOIL:** No data available

#### 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.

#### SECTION 13 NOTES:

#### SECTION 14: TRANSPORT INFORMATION

#### U.S. DEPARTMENT OF TRANSPORTATION

UN No.

UN1170

**Proper Shipping Name** Ethanol Solution  
**Hazard Class** 3  
**Packing Group** II

## TDG

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

## IATA

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

## IMDG/IMP

**UN No.** UN1170  
**Proper Shipping Name** Ethanol Solution  
**Hazard Class** 3  
**Packing Group** II  
**EMS-No: F-E, S-E**

## SECTION 15: REGULATORY INFORMATION

### United States

**HCS Classification:** Target Organ Effect, Irritant, Toxic by skin absorption, Carcinogen

### 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:**

Acute Health Hazard; Chronic Health Hazard

**SARA 313 Form R - Reporting:** The following components are subject to reporting levels established

### DEA List I & II Chemicals

**(Precursor Chemicals):** Not Listed

### CERCLA:

**RTK STATES:** Phenol CAS#108-95-2 PA, NJ, MA, RI Fuchsin Basic CAS#569-61-9: PA, NJ Methanol CAS#67-56-1 PA, NJ, MA, RI

### California Prop. 65



**WARNING:** This product can expose you to chemicals including C.I. Basic Red 9 monohydrochloride and Methanol, which are known to the State of California to cause cancer and birth defects or other reproductive harm.

For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

### CANADA

**WHMIS (Canada):** B3 Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).

D2A Material causing other toxic effects (Very toxic).  
E Corrosive material  
D1A Material causing immediate and serious toxic effects (Very 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: Methanol  
Volatile organic compounds

**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.

**PREPARATION INFORMATION:** Prepared 12/28/2015 REV1

Updated component information 7/26/2016 REV2

Reviewed: 07/20/2017

Revision: 10/01/2018 Updated Prop 65 warning REV3