

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Giemsa Stain Solution

SYNONYMS: None

PRODUCT CODES: ES915, ES916, ES917

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: laboratory Reagent

PREPARED BY: CB

SECTION 1 NOTES:

SECTION 2: HAZARDS IDENTIFICATION

GHS CLASSIFICATION: Flammable liquid Category 2; Skin Corrosion/Irritation Category 2; Serious eye damage/irritation Category 1; Acute Toxicity, Dermal Category 3; Acute Toxicity, Oral Category 4; Specific Target Organ Toxicity (Single Exposure) Category 1



Signal Word: Danger!

Hazard Phrases			
H225	Highly flammable liquid and vapor.		
H301+H311	Toxic if swallowed or in contact with skin.		
H315	Causes skin irritation.		
H318	Causes serious eye damage.		
H372	Causes damage to organs.		

Precautionary Phrases		
P210	Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.	
P233	Keep container tightly closed.	
P241	Use explosion-proof electrical/ventilating/lighting/equipment.	
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.	
P264	Wash skin thoroughly after handling.	
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.	
P303+P361+P353	IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with 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.	
P307+P311	IF exposed: Call a POISON CENTER or doctor/ physician.	



SECTION 2 NOTES:

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL DESCRIPTION:

INGREDIENT:	CAS NO.	<u>% WT</u>	
Methanol	67-56-1	<50	
Glycerin	56-81-5	<50	
Giemsa Stain	51811-82-6	<1	
Diethylamine hydrochloride	660-68-4	<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 medical attention immediately.

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. If skin irritation occurs: Get medical attention/advice.

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.

SECTION 4 NOTES: Note to Physician: Persons with pre-existing skin disorders or impaired respiratory/pulmonary function may be at increased risk of exposure. Treat symptomatically and supportively.

SECTION 5: FIRE-FIGHTING MEASURES

FLASH POINT: Open cup: 15.85°C (60.5°F) (Methyl Alcohol) **AUTOIGNITION TEMPERATURE:** 464°C (867.2°F) (Methyl Alcohol)

NFPA HAZARD CLASSIFICATION

HEALTH: 2 FLAMMABILITY: 3 REACTIVITY: 0

OTHER:

HMIS HAZARD CLASSIFICATION

HEALTH:2 FLAMMABILITY: 3 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: In a fire or if heated, a pressure increase will occur and the container may burst with the risk of a subsequent explosion. Run-off to sewer may create fire or explosion hazard. Wear protective clothing with NIOSH approved breathing apparatus.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon expected to be the primary combustion product.

SECTION 5 NOTES: May give off irritating or toxic fumes (or gases) in a fire.



SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES:

Small spill and leak: Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8). 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: 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 breathe vapors. Do not eat, drink or smoke when using this product. Keep away from heat, sparks and open flames, hot surfaces. Keep container tightly closed

STORAGE: Store locked up. Store in a well-ventilated place. Keep cool.

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.

PERSONAL PROTECTIVE MEASURES: Wear gloves, lab coat, eye protection and impervious footwear.

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
Methyl Alcohol	67-56-1	200ppm (260 mg/m ³)	Absorbed through skin.
Glycerin	56-81-5	15 mg/m³ (total)	
Glycerin	56-81-5	5 mg/m³ (resp.)	

ACGIH Threshold Limit values (TLVs):

Reagent	CAS#	ACGIH PEL TWA	ACGIH STEL	Note
Methyl Alcohol	67-56-1	200ppm (260	250ppm (328	Absorbed
		mg/m³)	mg/m³)	through skin.
Glycerin	56-81-5	10 mg/m ³ (mist)		

SECTION 8 NOTES:

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Dark blue



ODOR: Characteristic, alcohol-like

PHYSICAL STATE: liquid

pH AS SUPPLIED: Not available **BOILING POINT:** Not available

MELTING POINT/ 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 available

SECTION 9 NOTES:

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Product is stable under normal conditions of use.

CONDITIONS TO AVOID (STABILITY): Direct sunlight. Extreme high or low temperatures. **INCOMPATIBILITY (MATERIAL TO AVOID):** Reacts violently with oxidizing materials.

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): None

SECTION 10 NOTES:

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

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

LDlo (Oral, human) 143 mg/kg (Signs and symptoms of dyspnea and GI disturbances such as

nausea, vomiting and diarrhea)

Inhalation: 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: No data available

Eyes: Rabbit: No eye irritation

Respiratory or skin sensitization: Maximization Test - Guinea Pig - Sensitization not displayed in laboratory animals

when following OECD Test Guideline 406.

Germ cell mutagenicity: No data available

Carcinogenicity:

Methyl Alcohol: NIOSH: Not classifiable as a human carcinogen ACGIH: Not classifiable as a human carcinogen

NTP: Not classifiable as a human carcinogen IARC: Not classifiable as a human carcinogen

Aspiration hazard: no data available

POTENTIAL HEALTH EFFECTS:

EYES: Direct contact with the eyes produces a mild, reversible irritation, assuming treatment is initiated promptly.

SKIN: Cause moderate skin irritation. Can cause dermatitis by de-fatting the skin from prolonged or repeated contact.

Methyl alcohol can be absorbed through skin and be toxic.

INGESTION: Methyl Alcohol can be fatal or cause blindness through ingestion. Ingestion may cause gastrointestinal disturbances such as nausea, vomiting and diarrhea. Cannot be made non-poisonous.

INHALATION: Toxic by inhalation. Vapor harmful. Can cause irritation to the respiratory tract.

CHRONIC HEALTH HAZARDS: Effects may be delayed. Prolonged exposure can cause liver, kidney, and heart damage. Long term exposure can cause loss of appetite, weight loss, nervousness, memory loss, mental retardation. Repeated skin exposure may cause defatting of the skin.





SIGNS AND SYMPTOMS OF EXPOSURE: Warning: Contains methanol. May be fatal or cause blindness if swallowed. Cannot be made non-poisonous. Effects due to ingestion may include: gastrointestinal disturbance, headache, nausea, vomiting, dizziness, weakness, confusion, drowsiness, unconsciousness. To the best of our knowledge, the chemical, physical, and toxicological properties of this mixture have not been thoroughly investigated.

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

TARGET ORGANS: Nerves., Liver, Heart, Eyes, Kidney, Central nervous system

SECTION 11 NOTES:

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL TOXICITY: Methyl Alcohol EC50 Oncorhynchus mykiss; 48hr 13200 mg/l EC50 Lepomis Macrochirus: 48hr 16000 mg/l

LC50 Daphia Magna: 96hr >100mg/l LC50 Pimephales Promelas: 96hr >100mg/l LC50 Lepomis Macrochirus: 96hr 15400 mg/l

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. UN1230

Proper Shipping Name: Methanol

Hazard Class:3 Packing Group: II

Label Statement: Flammable liquid

IMDG

UN No. UN1230

Proper Shipping Name: Methanol

Hazard Class:3

Subsidiary Hazard Class: 6.1

Packing Group: II EMS-No: F-E, S-D Marine pollutant: No

IATA

UN No. UN1230



Proper Shipping Name: Methanol

Hazard Class: 3

Subsidiary Hazard Class: 6.1

Packing Group: II

SECTION 15: REGULATORY INFORMATION

United States

HCS Classification: Flammable liquid, Highly toxic material, Irritating material, Target organ effects

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: Methanol

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

Methanol: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard

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

by SARA Title III, Section 313:

DEA List I & II Chemicals

(Precursor Chemicals): Not Listed

CERCLA: Methyl Alcohol: RQ 5000 lb.

RTK STATES: Methyl Alcohol: MA, NJ, PA, RI, NY, FL

California Prop. 65:

WARNING: This product can expose you to chemicals including Methanol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

CANADA

WHMIS (Canada): Class B-2: Flammable liquid

Class D-1A: Material causing immediate and serious toxic effects (Very toxic).

Class D-2B: Material causing other toxic effects (Toxic). **CEPA Toxic substances:** None of the components are listed.

Canadian lists: CEPA Toxic substances: None of the components are listed.

Canadian ARET: None of the components are listed.

Canadian NPRI: The following components are listed: Methanol

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 (NFPA)



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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