

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Modified Wright-Giemsa Stain Pack

SYNONYMS: None

PRODUCT CODES: ES901

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 System

PREPARED BY: CB

SECTION 1 NOTES: This product is a pre-packaged stain set designed and labeled as a kit. Individual components are not labeled or available for individual sale. SDS for each of the components listed follows.

Product Name: Wright-Giemsa Stain Solution

Product Code: ES901A (Stain Solution)

Product Name: Hematology Buffer Solution, pH 6.8

Product Code: ES901B (Buffer Solution)

Product Name: Hematology Rinse Solution, pH 7.0

Product Code: ES901C (Rinse Solution)

SECTION 2: HAZARDS IDENTIFICATION

Product Name: Wright-Giemsa Stain Solution

Product Code: ES901A (Stain Solution)

GHS CLASSIFICATION: Flammable liquid Category 2; Serious eye damage/eye irritation, Category 2; Acute Toxicity, Dermal Category 4; Acute Toxicity, Inhalation Category 4; Acute Toxicity, Oral Category 4; Specific Target Organ Toxicity - single exposure (CNS, optic nerve, respiratory system) Category 2



Signal Word: Danger!

Hazard Phrases	
H225	Highly flammable liquid and vapor
H319	Causes serious eye irritation.
H302+H312	Harmful if swallowed or in contact with skin.
H371	May cause damage to organs.
H332	Harmful if inhaled.

Precautionary Phrases	
P210	Keep away from heat, sparks, open flames and hot surfaces. No smoking.

P260	Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P264	Wash hands thoroughly after handling.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
P304+P311	IF INHALED: 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.
P307+P311	IF exposed: Call a POISON CENTER or doctor/ physician.
P405	Store locked up.

SECTION 2 NOTES:
SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT:	CAS NO.	% WT
Methanol	67-56-1	<100
Wright Stain	68988-92-1	<1
Eosin Y	17372-87-1	<1
Methylene Blue	7220-79-3	<1
Azure A	531-53-3	<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 if you feel unwell.

SECTION 4 NOTES: Note to Physician: Treat symptomatically

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABILITY OF THE PRODUCT: OSHA/NFPA Class IB Flammable Liquid

FLASH POINT: 15.85°C (60.5°F) - closed cup

AUTOIGNITION TEMPERATURE: 464°C (867°F)

NFPA HAZARD CLASSIFICATION

HEALTH:2 FLAMMABILITY: 3 REACTIVITY: 0
OTHER:

HMIS HAZARD CLASSIFICATION

HEALTH:2 FLAMMABILITY: 3 REACTIVITY: 0
PROTECTION:

EXTINGUISHING MEDIA: Small fire - use DRY chemical powder, CO₂, water spray or alcohol resistant foam. Large fire - use alcohol resistant foam, water spray or fog. Cool all affected containers with flooding quantities of water.

NOT SUITABLE: Do not use water jet.

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus and protective clothing to protect contact with skin and eyes. Keep unopened containers cool by spraying with water. Alcohols burn with a pale blue flame which may be difficult to see under normal lighting conditions. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide

UNUSUAL FIRE AND EXPLOSION HAZARDS: May produce a floating fire hazard. Vapors may travel to source of ignition and flash back. Vapors may settle on low or confined spaces.

SECTION 5 NOTES: Static ignition hazard can result from handling and use. Keep away from sparking tools.

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES:

Small spill and leak: Ensure adequate ventilation. Remove all sources of ignition. Dilute with water and mop, or absorb with an inert dry material and place in appropriate waste disposal container.

Large spill and leak: Keep away from heat and ignition sources. Stop leak if without risk. Absorb with DRY earth, sand, or other non-combustible material. Avoid skin and eye contact. Prevent entry into sewers, basements or confined areas; dike if needed. Additional protective equipment such as full-face respirator, full body suit and boots may be required.

SECTION 6 NOTES:

SECTION 7: HANDLING AND STORAGE

HANDLING: Do not get in eyes or on skin. Do not breathe vapor or mist. If potential for splashing exists, protect skin by using sleeve protectors, aprons and face-shield. Immediately remove contaminated clothing. Wash thoroughly after handling.

STORAGE: Keep away from sources of ignition. Keep containers closed and out of reach of children. Ground all equipment containing material. Containers which are opened must be 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.

PERSONAL PROTECTIVE MEASURES: Wear gloves, lab coat, eye protection and impervious footwear. Approved/certified respirator if airborne concentrations exceed exposure limits

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.

ACGIH Threshold Limit values (TLVs):

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

SECTION 8 NOTES:

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Blue
ODOR: Characteristic, alcohol-like
PHYSICAL STATE: liquid
pH AS SUPPLIED: Not available
BOILING POINT: 64°C (147°F)
MELTING POINT/FREEZING POINT: -98°C (-144°F)
VAPOR PRESSURE (mmHg): 97.7 mmHg @ 20°C
VAPOR DENSITY (AIR = 1): 1.1
EVAPORATION RATE: Specific data not available, expected to be rapid.
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): Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Vapors may form explosive mixture with air. 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: Heat, open flame

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.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

Dermatitis, emphysema, bronchitis and conjunctivitis.

SIGNS AND SYMPTOMS OF EXPOSURE: Central nervous system depression, blindness

ROUTES OF ENTRY: Ingestion, Skin/eye contact, inhalation

TARGET ORGANS: CNS, optic nerve, respiratory system

SECTION 11 NOTES:

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL TOXICITY:

Methyl Alcohol 67-56-1

Acute Fish Toxicity:

LC50 / 96 hours Lepomis macrochirus: 15,400 mg/L / LC50 / 96 hours Fathead minnow: 29,400 mg/L

Toxic to Daphnia and Other Aquatic Invertebrates:

EC50 / 48 h / Water Flea - >10,000.00 mg/L

Toxicity to Aquatic Plants:

EC50 / 96 hours Scenedesmus capricornutum 22,000 mg/L

PERSISTENCE 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. Burn in a chemical incinerator equipped with an afterburner and scrubber. Take extra care in lighting as this material is highly flammable. 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. UN1230

Proper Shipping Name: Methanol

Hazard Class:3

Packing Group: II
Label Statement: Flammable liquid
* Ships as "Limited Quantity" exception per §49 CFR

IMDG

UN No. UN1230
Proper Shipping Name: Methanol
Hazard Class:3
Packing Group: II
EMS-No: F-E, S-D
Marine pollutant: No

IATA

UN No. UN1230
Proper Shipping Name: Methanol
Hazard Class:3
Packing Group: II

SECTION 15: REGULATORY INFORMATION

United States

HCS Classification: Flammable liquid, Target organ effects, Toxic by inhalation, Toxic by ingestion, Toxic by skin absorption

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, Fire Hazard

SARA 313 Form R - Reporting: The following components are subject to reporting levels established by SARA Title III, Section 313: METHANOL (CAS# 67-56-1)

DEA List I & II Chemicals

(Precursor Chemicals): Not Listed

CERCLA: Methanol CAS-No. 67-56-1. RQ: 5,000 lbs

RTK STATES: Methyl Alcohol CAS 67-56-1 CT, MA, NJ, PA, RI, FL, CT

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

Canadian lists:

CEPA Toxic substances: Listed
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 (NFPA)



End of SDS ES901A (Stain Solution A)

SECTION 2: HAZARDS IDENTIFICATION

Product Name: Hematology Buffer Solution, pH 6.8

Product Code: ES901B (Buffer Solution)

GHS CLASSIFICATION: Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

GHS Label elements:

Pictogram: none

Signal word: none

OSHA HAZARDS: No known OSHA hazards

SECTION 2 NOTES: Although this product does not normally require specific hazard precautions, chemical users should always take care to minimize personnel exposure and workplace contamination.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT:	CAS NO.	% WT
Water	7732-18-5	>99
Sodium Phosphate, dibasic	7558-79-4	<1
Potassium Phosphate, monobasic	7778-77-0	<1
Sodium Azide	26628-22-8	<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 if symptoms occur.

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 symptoms occur.

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. Get medical attention if you feel unwell.

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 symptoms persist.

SECTION 4 NOTES:

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABILITY OF THE PRODUCT: Not a flammable liquid

FLASH POINT: Not available

AUTOIGNITION TEMPERATURE: Not available

NFPA HAZARD CLASSIFICATION

HEALTH: 1 FLAMMABILITY: 0 REACTIVITY: 0

OTHER:

HMIS HAZARD CLASSIFICATION

HEALTH: 0 FLAMMABILITY: 0 REACTIVITY: 0

PROTECTION:

EXTINGUISHING MEDIA: Use extinguishing material suitable for surrounding fire.

NOT SUITABLE: N/A

SPECIAL FIRE FIGHTING PROCEDURES: No special firefighting procedures for this solution.

HAZARDOUS DECOMPOSITION PRODUCTS: Nature of decomposition products is unknown.

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: Stop leak if without risk. Move containers from spill area. 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).

SECTION 6 NOTES:

SECTION 7: HANDLING AND STORAGE

HANDLING: Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Do not reuse container.

STORAGE: Store in accordance with local regulations. Store in a segregated and approved area. 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.

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: No special equipment required.

EYE PROTECTION: Glasses or splash goggles recommended in accordance with good industrial hygiene and safety practice.

SKIN PROTECTION: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

EXPOSURE GUIDELINES: No component meets occupational exposure limits.

SECTION 8 NOTES:

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear, colorless

ODOR: Odorless

PHYSICAL STATE: liquid

pH AS SUPPLIED: 6.8

BOILING POINT: 100°C

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): Under normal conditions of storage and use, hazardous reactions will not occur.

INCOMPATIBILITY (MATERIAL TO AVOID): Not available

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: No known hazardous decomposition products.

HAZARDOUS POLYMERIZATION: No hazardous polymerization

CONDITIONS TO AVOID (POLYMERIZATION): N/A

SECTION 10 NOTES:

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

Oral LD50: no data available

Inhalation LC50: no data available

Dermal LD50: no data available

Other information on acute toxicity: no data available

Skin corrosion/irritation: no data available

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: no data available
Carcinogenicity: no data available
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: May be harmful if inhaled.
Ingestion: May be harmful if swallowed.
Skin: May cause mild skin irritation.
Eyes: May cause mild eye irritation.
Signs and Symptoms of Exposure: No data available.

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

TARGET ORGANS: Not available.

SECTION 11 NOTES:

SECTION 12: ECOLOGICAL INFORMATION

TOXICITY: No known environmental toxicity.
PERSISTENCE AND DEGRADABILITY: No data available.
BIOACCUMULATIVE POTENTIAL: No data available.
MOBILITY IN SOIL: No data available.
PBT and vPvB ASSESSMENT: Not required.

SECTION 12 NOTES:

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: As supplied, not regulated for waste disposal. 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: Not Regulated

TDG: Not Regulated

IATA: Not Regulated

IMDG/IMP: Not Regulated

SECTION 15: REGULATORY INFORMATION

United States

HCS Classification: Not Classified

U.S. Federal regulations:

TSCA 8(a) IUR: Partial exemption

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: No products were found.

SARA 313 Form R - Reporting: No products were found.

DEA List I & II Chemicals
(Precursor Chemicals): Not Listed

RTK STATES: None

California Prop. 65

This product does not contain any chemicals known to the State of California to cause birth defects or other reproductive harm.

CANADA
WHMIS (Canada): Not Controlled

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

Canadian ARET: None of the components are listed.

Canadian NPRI: None of the 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 SDS contains all the information required by the Controlled Products Regulations.

SECTION 16: OTHER INFORMATION

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

End of SDS ES901B (Buffer Solution B)

SECTION 2: HAZARDS IDENTIFICATION

Product Name: Hematology Rinse Solution, pH 7.0

Product Code: ES901C (Rinse Solution)

GHS CLASSIFICATION: Flammable liquid Category 3; Serious eye damage/eye irritation, Category 2; Acute Toxicity, Dermal Category 4; Acute Toxicity, Inhalation Category 4; Acute Toxicity, Oral Category 4; Specific Target Organ Toxicity - single exposure (CNS, optic nerve, respiratory system) Category 3

Signal Word: Danger!

Hazard Phrases	
H226	Flammable liquid and vapor
H319	Causes serious eye irritation.
H302+H312	Harmful if swallowed or in contact with skin.
H336	May cause drowsiness or dizziness.
H332	Harmful if inhaled.

Precautionary Phrases	
P210	Keep away from heat, sparks, open flames and hot surfaces. No smoking.
P260	Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P264	Wash hands thoroughly after handling.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
P304+P311	IF INHALED: 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.
P307+P311	IF exposed: Call a POISON CENTER or doctor/ physician.
P405	Store locked up.

SECTION 2 NOTES:
SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT:	CAS NO.	% WT
Water	7732-18-5	<90
Sodium Phosphate, Dibasic	7558-79-4	<1
Potassium Phosphate, Monobasic	7778-77-0	<1
Methanol	67-56-1	~10
Brij-35	9002-92-0	<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 if you feel unwell.

SECTION 4 NOTES: Note to Physician: Treat symptomatically

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABILITY OF THE PRODUCT: OSHA/NFPA Class IB Flammable Liquid

FLASH POINT: 15.85°C (60.5°F) - closed cup (Methanol)

AUTOIGNITION TEMPERATURE: 464°C (867°F) (Methanol)

NFPA HAZARD CLASSIFICATION

HEALTH:1 FLAMMABILITY: 3 REACTIVITY: 0
OTHER:

HMIS HAZARD CLASSIFICATION

HEALTH:1 FLAMMABILITY: 3 REACTIVITY: 0
PROTECTION:

EXTINGUISHING MEDIA: Small fire - use DRY chemical powder, CO₂, water spray or alcohol resistant foam. Large fire - use alcohol resistant foam, water spray or fog. Cool all affected containers with flooding quantities of water.

NOT SUITABLE: Do not use water jet.

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus and protective clothing to protect contact with skin and eyes. Keep unopened containers cool by spraying with water. Alcohols burn with a pale blue flame which may be difficult to see under normal lighting conditions. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide

UNUSUAL FIRE AND EXPLOSION HAZARDS: May produce a floating fire hazard. Vapors may travel to source of ignition and flash back. Vapors may settle on low or confined spaces.

SECTION 5 NOTES: Static ignition hazard can result from handling and use. Keep away from sparking tools.

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES:

Small spill and leak: Ensure adequate ventilation. Remove all sources of ignition. Dilute with water and mop, or absorb with an inert dry material and place in appropriate waste disposal container.

Large spill and leak: Keep away from heat and ignition sources. Stop leak if without risk. Absorb with DRY earth, sand, or other non-combustible material. Avoid skin and eye contact. Prevent entry into sewers, basements or confined areas; dike if needed. Additional protective equipment such as full-face respirator, full body suit and boots may be required.

SECTION 6 NOTES:

SECTION 7: HANDLING AND STORAGE

HANDLING: Do not get in eyes or on skin. Do not breathe vapor or mist. If potential for splashing exists, protect skin by using sleeve protectors, aprons and face-shield. Immediately remove contaminated clothing. Wash thoroughly after handling.

STORAGE: Keep away from sources of ignition. Keep containers closed and out of reach of children. Ground all equipment containing material. Containers which are opened must be 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.

PERSONAL PROTECTIVE MEASURES: Wear gloves, lab coat, eye protection and impervious footwear. Approved/certified respirator if airborne concentrations exceed exposure limits

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
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Methyl Alcohol	67-56-1	200ppm (260 mg/m ³)	Absorbed through skin.
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ACGIH Threshold Limit values (TLVs):

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

SECTION 8 NOTES:
SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear, colorless

ODOR: Slight alcohol

PHYSICAL STATE: liquid

pH AS SUPPLIED: 7.0

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 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): Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Vapors may form explosive mixture with air. 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: Heat, open flame

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.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

Dermatitis, emphysema, bronchitis and conjunctivitis.

SIGNS AND SYMPTOMS OF EXPOSURE: Central nervous system depression, blindness

ROUTES OF ENTRY: Ingestion, Skin/eye contact, inhalation

TARGET ORGANS: CNS, optic nerve, respiratory system

SECTION 11 NOTES:

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL TOXICITY:

Methyl Alcohol 67-56-1

Acute Fish Toxicity:

LC50 / 96 hours Lepomis macrochirus: 15,400 mg/L / LC50 / 96 hours Fathead minnow: 29,400 mg/L

Toxic to Daphnia and Other Aquatic Invertebrates:

EC50 / 48 h / Water Flea - >10,000.00 mg/L

Toxicity to Aquatic Plants:

EC50 / 96 hours Scenedesmus capricornutum 22,000 mg/L

PERSISTENCE 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. Burn in a chemical incinerator equipped with an afterburner and scrubber. Take extra care in lighting as this material is highly flammable. 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. UN1230

Proper Shipping Name: Methanol
Hazard Class:3
Packing Group: II
Label Statement: Flammable liquid
* Ships as "Limited Quantity" exception per §49 CFR

IMDG

UN No. UN1230
Proper Shipping Name: Methanol
Hazard Class:3
Packing Group: II
EMS-No: F-E, S-D
Marine pollutant: No

IATA

UN No. UN1230
Proper Shipping Name: Methanol
Hazard Class:3
Packing Group: II

SECTION 15: REGULATORY INFORMATION

United States

HCS Classification: Flammable liquid, Target organ effects, Toxic by inhalation, Toxic by ingestion, Toxic by skin absorption

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, Fire Hazard

SARA 313 Form R - Reporting: The following components are subject to reporting levels established by SARA Title III, Section 313: METHANOL (CAS# 67-56-1)

DEA List I & II Chemicals

(Precursor Chemicals): Not Listed

CERCLA: Methanol CAS-No. 67-56-1. RQ: 5,000 lbs

RTK STATES: Methyl Alcohol CAS 67-56-1 CT, MA, NJ, PA, RI, FL, CT

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

Canadian lists:

CEPA Toxic substances: Listed
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 (NFPA)



End of SDS ES901C (Hematology Rinse Solution C)

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 03/30/2015

Revision 1: Reformatted, Reviewed 09/06/2017

Revision 2: Updated Prop 65 Statement 06/07/2019

End of SDS ES901 Wright-Giemsa Stain Pack