AZER SCIENTIFIC

SDS Safety Data Sheet – Acetic Acid Solution 0.5%

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Acetic Acid Solution (0.5%)
SYNONYMS: None
PRODUCT CODES: Component of Stain Kits

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: Skin Irritation Category 2; Eye Irritation Category 2A



Signal Word: Warning!

Hazard Phrases	
H319	Causes serious eye irritation.
H315	Causes skin irritation.

Precautionary Phrases	
P302+P352	IF ON SKIN: 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 so. Continue rinsing.
P337+P315	If eye irritation persists: Get medical advice/attention.

SECTION 2 NOTES:

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Description: Mixture
*May contain additional non-hazardous proprietary ingredients.
**May contain additional active ingredients at concentrations <1% w/v

INGREDIENT:	**CAS NO.**	**% WT**
Acetic Acid	64-19-7	≤0.5

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. Clean shoes thoroughly before reuse. Get medical attention if irritation develops.

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 medical attention if symptoms worsen.

SECTION 4 NOTES:

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABILITY OF THE PRODUCT:

FLASH POINT: Not Available

AUTOIGNITION TEMPERATURE: Not Available

NFPA HAZARD CLASSIFICATION
HEALTH: 1 FLAMMABILITY: 0 REACTIVITY: 0
OTHER:

HMIS HAZARD CLASSIFICATION
HEALTH: 1 FLAMMABILITY: 0 REACTIVITY: 0
PROTECTION: B

EXTINGUISHING MEDIA: Use dry chemical, CO2, 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 positive pressure mode.

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. Do not allow product to enter drains.

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. Note: see section 1 for emergency contact information and section 13 for waste disposal.

SECTION 6 NOTES:

SECTION 7: HANDLING AND STORAGE

HANDLING: Avoid contact with skin and eyes. Wash thoroughly after handling. Avoid breathing vapor.

STORAGE: Store in accordance with local regulations. Store in a segregated and approved area. Store in a well ventilated area. Store at 15-30°C

SECTION 7 NOTES:

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

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.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Recommended: lab coat

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. Ensure that eyewash stations and safety showers are close to the workstation location.

EXPOSURE GUIDELINES:

Component	Source	Type	Value	Note
Acetic Acid	OSHA PEL	TWA	10 ppm (25 mg/m^3)	
	NIOSH REL	TWA	10 ppm (25 mg/m^3)	
	NIOSH REL	STEL	15 ppm (37 mg/m^3)	
	ACGIH TLV	TWA	10 ppm	
	ACGIH TLV	STEL	15 ppm (37 mg/m^3)	

SECTION 8 NOTES: Avoid releasing large quantities into the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Colorless
ODOR: Slight vinegar odor
PHYSICAL STATE: Liquid.
pH AS SUPPLIED: (1% solution/water): neutral
BOILING POINT: Not Available
MELTING POINT: Not Available
FREEZING POINT: Not Available
VAPOR PRESSURE (mmHg): 18@ 20°C
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): strong oxidizing agents, strong acids, strong bases

INCOMPATIBILITY (MATERIAL TO AVOID): Strong oxidizers, reducing agents, metals, acids, alkalis

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: None known

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
May be irritating to skin and mucous membranes.
Serious eye damage/eye irritation
May be irritating to the eye.
Respiratory or skin sensitization

no data available
Germ cell mutagenicity:
no data available
Carcinogenicity:
International Agency for Research on Cancer (IARC).
None of the components are listed.
National Toxicology Program (NTP).
None of the components are listed.
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 cause respiratory tract irritation.
Ingestion May be harmful if swallowed.
Skin Causes skin irritation.
Eyes Causes eye irritation.
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.

ACUTE HEALTH HAZARDS: See above, potential health effects.

SECTION 11 NOTES:

SECTION 12: ECOLOGICAL INFORMATION

Toxicity:
Fish: No relevant studies identified.
Crustacea: No relevant studies identified.
Algae/Aquatic Plants: No relevant studies identified.
Other Organisms: No relevant studies identified.

Persistence and degradability
no data available
Bioaccumulative potential
no data available
Mobility in soil
no data available
PBT and vPvB assessment
no data available
Other adverse effects
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: Not Regulated
PROPER SHIPPING NAME:
HAZARD CLASS:
ID NUMBER:
PACKING GROUP:

AIR TRANSPORTATION (IATA): Not Regulated
PROPER SHIPPING NAME:
HAZARD CLASS:
ID NUMBER:
PACKING GROUP:
LABEL STATEMENTS:

IMDG: Not Regulated
EU ADR/RID: Not Regulated

SECTION 14 NOTES:

SECTION 15: REGULATORY INFORMATION

United States

U.S. Federal regulations:

United States inventory (TSCA 8b):
TSCA 8(d) H and S data reporting:
TSCA (Toxic Substance Control Act): All components are listed on the TSCA 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:
SARA 311/312 MSDS distribution - chemical inventory - hazard identification:
SARA 313: No products were found.
Clean Water Act (CWA) 307
Clean Water Act (CWA) 311
Clean Air Act (CAA) 112 accidental release prevention: No products were found.
Clean Air Act (CAA) 112 regulated flammable substances: No products were found.
Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

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

States RTK: Acetic Acid CAS# 64-19-7 PA, MA, NJ, RI

California Prop. 65
This product does not contain any chemicals known to the State of California to cause birth defects or other reproductive harm: None

CANADA
WHMIS (Canada): Class D-2 Material causing other toxic effects.

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:

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): Not determined.
Japan inventory: All components are listed or exempted.
Korea inventory: All components are listed or exempted.
New Zealand Inventory of Chemicals (NZIoC): Not determined.
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 7/21/2015 REV1

AZER SCIENTIFIC

SDS Safety Data Sheet–Acid Alcohol Solution 0.5%

7/2015

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Acid Alcohol Solution 0.5%
SYNONYMS: None
PRODUCT CODES: Component of AFB Stain Kit ES3405

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 NOTE:

SECTION 2: HAZARDS IDENTIFICATION

GHS CLASSIFICATION: Flammable Liquid Category 2, Serious eye damage/Eye irritation Category 2A, Skin Irritation Category 2, Acute Toxicity Oral Category 5



Signal word: **Danger!**

Hazard Phrases	
H225	Highly flammable liquid and vapor.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H303	May be harmful if swallowed.

Precautionary Phrases	
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking
P302+P351	IF ON SKIN: 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+P315	If eye irritation persists, get immediate medical attention.
P301+P312	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

SECTION 2 NOTES:

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Description: Mixture
*May contain additional non-hazardous proprietary ingredients.
**May contain additional active ingredients at concentrations <1% w/v

INGREDIENT:	**CAS NO.**	**% V**
Ethanol	64-17-5	≤65
Isopropyl Alcohol	67-63-0	≤4
Hydrochloric Acid	7647-01-0	0.5

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 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. Clean shoes thoroughly before reuse. Get medical attention if irritation develops.

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 symptoms worsen

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. Run-off to sewer may create fire or explosion hazard.

FLASH POINT: Not Available

AUTOIGNITION TEMPERATURE: Not Available

NFPA HAZARD CLASSIFICATION
HEALTH: 1 FLAMMABILITY: 3 REACTIVITY: 0
OTHER:

HMIS HAZARD CLASSIFICATION
HEALTH: 1 FLAMMABILITY: 3 REACTIVITY: 0
PROTECTION: H

EXTINGUISHING MEDIA: Use dry chemical, CO2, 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 positive pressure mode.

SPECIAL EXPOSURE HAZARDS: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

HAZARDOUS DECOMPOSITION PRODUCTS: carbon monoxide, carbon dioxide

SPECIAL REMARKS ON EXPLOSION HAZARDS:
Vapor may cause flash fire. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

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. 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. Note: see section 1 for emergency contact information and section 13 for waste disposal.

SECTION 6 NOTES:

SECTION 7: HANDLING AND STORAGE

HANDLING: Do not get in eyes or 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. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Use empty containers to retain product, residue can be hazardous. 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. 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 at 15-30°C

SECTION 7 NOTES:

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

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: 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

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: 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

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. Ensure that eyewash stations and safety showers are close to the workstation location.

EXPOSURE GUIDELINES: Consult local authorities for acceptable exposure limits

Ingredient	**Exposure limits**
Ethanol	**ACGIH TLV (United States, 3/2012).** STEL: 1000 ppm 15 minute(s). **OSHA PEL 1989 (United States, 3/1989).** TWA: 1900 mg/m³ 8 hour(s). TWA: 1000 ppm 8 hour(s). **NIOSH REL (United States, 1/2013).** TWA: 1000 ppm 10 hour(s). TWA: 1900 mg/m³ 10 hour(s). **OSHA PEL (United States, 6/2010).** TWA: 1000 ppm 8 hour(s). TWA: 1900 mg/m³ 8 hour(s).
Hydrochloric Acid	**ACGIGH** 7ppm CEIL **OSHA** 5ppm **NIOSH** 5ppm, STEL 7 ppm
Isopropyl Alcohol	**NIOSH REL** TWA 400 ppm (980 mg/m^3) ST 500 ppm (1225 mg/m^3) **OSHA PEL** TWA 400 ppm (980 mg/m^3) **ACGIH TLV** TWA 200 ppm STEL 400 ppm

SECTION 8 NOTES:

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear, colorless
ODOR: Mild alcohol odor
PHYSICAL STATE: liquid
pH AS SUPPLIED: N/A
BOILING POINT: Not available
MELTING POINT: N/A
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 all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

INCOMPATIBILITY (MATERIAL TO AVOID): Highly reactive or incompatible with the following materials with oxidizing materials, acids.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Hydrogen chloride, 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
no data available
Inhalation LC50
no data available
Dermal LD50
no data available
Other information on acute toxicity
no data available
Skin corrosion/irritation
Irritating to skin and mucous membranes

Serious eye damage/eye irritation
Seriously irritating to the eyes.
Respiratory or skin sensitization
no data available
Germ cell mutagenicity
no data available
Carcinogenicity

International Agency for Research on Cancer (IARC).
Hydrochloric Acid is listed as Group 3 – Not classifiable as to carcinogenicity in humans

National Toxicology Program (NTP).
None of the components are listed.

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
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.

POTENTIAL HEALTH EFFECTS

EYES: Causes eye irritation
SKIN: Causes skin irritation.
INGESTION: Toxic if swallowed.
INHALATION: Causes respiratory tract irritation.

ACUTE HEALTH HAZARDS: See above, potential health effects.

TARGET ORGANS: Nerves., Liver, Heart, Kidney

SECTION 11 NOTES:

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Fish: No relevant studies identified.
Crustacea: No relevant studies identified.
Algae/Aquatic Plants: No relevant studies identified.
Other Organisms: No relevant studies identified.

Persistence and degradability
no data available
Bioaccumulative potential
no data available
Mobility in soil
no data available
PBT and vPvB assessment
no data available
Other adverse effects
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
PROPER SHIPPING NAME: Ethanol solutions
HAZARD CLASS: 3
ID NUMBER: UN1170
PACKING GROUP: II
LABEL STATEMENT:
ENVIRONMENTAL HAZARDS: No

AIR TRANSPORTATION (IATA)
PROPER SHIPPING NAME: Ethanol solutions
HAZARD CLASS: 3
ID NUMBER: UN1170
PACKING GROUP: II
LABEL STATEMENTS:

OTHER AGENCIES:
IMDG: UN Number: 1170 Class: 3 Packing group: II EMS-No: F-E, S-E

Canadian TDG: UN No. 1170 Class 3 (6.1) Packing group II
Proper shipping name: Ethanol solutions

EU ADR/RID: UN Number: 1170 Class: 3 Packing group: II

SECTION 14 NOTES:

SECTION 15: REGULATORY INFORMATION

United States
HCS Classification: Flammable liquid, Toxic material, Irritating material, Target organ effects

U.S. Federal regulations:
United States inventory (TSCA 8b): TSCA (Toxic Substance Control Act): This product is listed on the TSCA Inventory.
TSCA 8(a) IUR: Partial Exemption
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: Ethyl Alcohol
SARA 311/312 MSDS distribution - chemical inventory - hazard identification:
Ethyl Alcohol: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard

SARA 313: No products were found.

Clean Air Act (CAA) 112 accidental release prevention: No products were found.
Clean Air Act (CAA) 112 regulated flammable substances: No products were found.
Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

DEA List I Chemicals
(Precursor Chemicals): Not listed

DEA List II Chemicals
(Essential Chemicals): Listed

RTK STATES: Ethanol CAS# 64-17-5: PA, NJ, MA, RI Isopropyl Alcohol CAS# 67-63-0 MA, PA, NJ
Hydrochloric Acid CAS# 7647-01-0 MA, PA, NJ

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-2B: Material causing other toxic effects (Toxic).

Canadian lists: **CEPA Toxic substances**: The following components are listed: Volatile organic compounds
Canadian ARET: None of the components are listed.
Canadian NPRI: The following components are listed: Ethanol
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 7/21/2015 REV1

AZER SCIENTIFIC

SDS Safety Data Sheet – Bouin's Fluid

09/2015

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Bouin's Fluid
SYNONYMS: None
PRODUCT CODES: Component of Stain Kits - ES4820, ES3398

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: Tissue fixation
PREPARED BY: CB

SECTION 1 NOTES:

SECTION 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: DANGER! CONTAINS FORMALDEHYDE – POTENTIAL CANCER HAZARD. REPEATED OR PROLONGED EXPOSURE INCREASES RISK. HIGHLY TOXIC BY INHALATION AND IF SWALLOWED. IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN. MAY CAUSE SENSITIZATION BY INHALATION OR SKIN CONTACT. RISK OF SERIOUS DAMAGE TO EYES. CORROSIVE; MAY CAUSE BURNS. KEEP CONTAINER CLOSED, USE WITH ADEQUATE VENTILATION.

GHS CLASSIFICATION:
Acute Toxicity, Oral Category 4
Serious Eye Damage Category 1
Skin Irritation Category 1A
Carcinogenicity Category 2
Specific Target Organ Toxicity – Single Exposure Category 3 (Respiratory System)



Hazard Phrases	
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H351	Suspected of causing cancer.
H335	May cause respiratory irritation.

Precautionary Phrases	
P260	Do not breathe fumes/mist/vapors/spray.
P264	Wash thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.

SECTION 2 NOTES:

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Description: Mixture
*May contain additional non-hazardous proprietary ingredients.
**May contain additional active ingredients at concentrations <1% w/v

INGREDIENT:	CAS NO.	%	SARA 313 REPORTABLE
Formaldehyde	50-00-0	≤8	Yes
Picric Acid	88-89-1	≤1	Yes
Acetic Acid	64-19-7	≤5	
Methyl Alcohol	67-56-1	≤2	

SECTION 3 NOTES:

SECTION 4: FIRST AID MEASURES

EYES: Check for and remove and contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occaisionally lifting the upper and lower eyelids. Get medical attention immediately

SKIN: Remove contaminated clothing immediately. Wash the affected areas with soap or mild detergent and large amounts of water for at least 15 minutes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if irritation develops.

INGESTION: If swallowed, rinse out mouth with water. Aspiration hazard. DO NOT induce vomiting. If vomiting occurs, keep head below hips to prevent aspiration into the lungs. Never give anything by mouth to a person who is unconscious or drowsy. Get immediate medical attention.

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 immediately.

SECTION 4 NOTES:

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR, UPPER: Not Available
(% BY VOLUME) LOWER: Not Available

FLASH POINT: Not Available

AUTOIGNITION TEMPERATURE: Not Available

NFPA HAZARD CLASSIFICATION
HEALTH: 3 **FLAMMABILITY:** 1 **REACTIVITY:** 0
OTHER:

HMIS HAZARD CLASSIFICATION
HEALTH: 3 **FLAMMABILITY:** 1 **REACTIVITY:** 0
PROTECTION: H

EXTINGUISHING MEDIA: Water spray, dry chemical, CO2 and foam

SPECIAL FIRE FIGHTING PROCEDURES: Wear protective clothing with NIOSH approved breathing apparatus. Products of combustion may be harmful in a fire situation. Do not use direct water stream.

UNUSUAL FIRE AND EXPLOSION HAZARDS: May emit toxic fumes under fire conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: Strong vapors and irritants, 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: 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. Ensure airborne

concentrations of formaldehyde do not exceed published exposure limits. Additional protective equipment such as full-face respirator, full body suit and boots may be required. **If airborn concentrations of formaldehyde exceed 7.5 ppm, only use SCBA or supplied air respirators.**

SECTION 6 NOTES:

SECTION 7: HANDLING AND STORAGE

HANDLING: Do not ingest. Avoid contact with eyes and skin. Do not breathe vapor or mist. Avoid prolonged or repeated contact with skin. If potential for splashing exists, protect skin by using sleeve protectors, aprons and face-shield. Immediately remove contaminated clothing. Wash thoroughly after handling.

STORAGE: Store in accordance with local regulations. Store in a segregated and approved area . Store in original container, protected from direct sunlight. Keep containers closed and sealed until ready for use. Containers that have been opened should be carefully resealed and kept upright to prevent leakage. Store at 15-30°C.

OTHER PRECAUTIONS: In the United States, refer to OSHA 1910.1048 for requirements for handling/use of formaldehyde solutions.

SECTION 7 NOTES:

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

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: 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

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: 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

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. Ensure that eyewash stations and safety showers are close to the workstation location.

EXPOSURE GUIDELINES:

Component	Source	Type	Value	Note
Formaldehyde	OSHA PEL (US)	TWA	0.75 ppm	
	OSHA PEL (US)	STEL	2 ppm	
	ACGIH (US)	TLV Ceiling	0.3 ppm	
Acetic Acid	OSHA PEL (US)	TWA	10 ppm	
	OSHA PEL (US)	TWA (mg/m^3)	25 mg/m^3	
	ACGIH (US)	TWA	10 ppm	
	ACGIH (US)	STEL	15 ppm	
Methanol	OSHA PEL (US)	TWA	200 ppm	Absorbed through skin
	OSHA PEL (US)	TWA (mg/m^3)	260 mg/m^3	Absorbed through skin
	ACGIH (US)	TWA	200 ppm	Absorbed through skin
	ACGIH (US)	STEL	250 ppm	Absorbed through skin
Picric Acid	ACGIH (US)	TWA (mg/m^3)	0.1 mg/m^3	
	OSHA (US)	PEL (mg/m^3)	0.1 mg/m^3	

SECTION 8 NOTES:

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Yellow, clear
ODOR: Pungent formaldehyde odor
PHYSICAL STATE: Liquid
pH AS SUPPLIED: 2.0 +/- 1.5
BOILING POINT:
F: 215° F
C: 101.7° C
MELTING POINT:
F: N/A
C: N/A
VAPOR PRESSURE (mmHg): Not Available
VAPOR DENSITY (AIR = 1): Not Available
SPECIFIC GRAVITY (H2O = 1): 1.04
EVAPORATION RATE: 0.36 (water)
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): N/A

INCOMPATIBILITY (MATERIAL TO AVOID): Reactive with oxidizing materials, Organics, Excessive heat

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Oxides of carbon, formic acid

HAZARDOUS POLYMERIZATION: No hazardous polymerization

CONDITIONS TO AVOID (POLYMERIZATION): N/A

SECTION 10 NOTES:

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:

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

POTENTIAL HEALTH EFFECTS

EYES: Hazardous in case of eye contact (irritant). May cause burns. May cause chemical conjunctivitis or corneal damage.

SKIN: Hazardous in case of skin contact (irritant, corrosive, sensitizer). Skin contact may produce burns. May cause skin sensitization which becomes evident upon re-exposure. Skin inflammation is characterized by itching, scaling, reddening or occasionally blistering.

INGESTION: May be fatal if swallowed. May cause burns to mouth, throat and stomach.

INHALATION: Hazardous in case of inhalation (lung irritant and sensitizer). Inhalation of spray mist may produce severe irritation of respiratory tract characterized by coughing, choking or shortness of breath. May cause asthmatic attacks due to allergic sensitization.

ACUTE HEALTH HAZARDS: See above, potential health effects.

CHRONIC HEALTH HAZARDS: Effects may be delayed. Formaldehyde has been associated with nasopharyngeal cancers. Repeated exposure may cause skin discoloration and nail decay. Inhalation may worsen conditions such as emphysema or bronchitis. Repeated skin exposure may cause defatting of the skin.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:
Dermatitis, emphysema, bronchitis and conjunctivitis.

CARCINOGENICITY

Formaldehyde **NIOSH:** Classified proven **ACGIH:** Classified A2(suspected for human) **NTP:** Classified 2(Reasonably anticipated) **IARC:** Classified A2(Probable for human)
Acetic Acid Not classified as a human carcinogen.

REPRODUCTIVE TOXICITY: Animal embryotoxin

TERATOGENIC AND MUTAGENIC EFFECTS: Teratogenicity have occurred in animals, mutagenicity suspect

SECTION 11 NOTES:

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION:

TOXICITY:

Formaldehyde:	LC50 Pimephales promelas (Fathead minnow) 24.1 mg/L/96 hr	
	EC50 Daphnia	14.7 mg/L (24 h)
Acetic Acid:	EC50 Daphnia	47 mg/L (24 h)
Methanol:	EC50 Daphnia	>10000 mg/L (48 h)

PERSISTANCE AND DEGRADABILITY: Formaldehyde has a half-life of less than one day. Products expected to be readily biodegradable

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: P and R-Series are not listed.

SECTION 13 NOTES:

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION
PROPER SHIPPING NAME: Corrosive liquid, Acidic, Organic, N.O.S. (Formaldehyde, Acetic Acid)
HAZARD CLASS: 8
ID NUMBER: UN3265
PACKING GROUP: III
LABEL STATEMENT: Corrosive
ENVIRONMENTAL HAZARDS: No

AIR TRANSPORTATION
PROPER SHIPPING NAME: Corrosive liquid, Acidic, Organic, N.O.S. (Formaldehyde, Acetic Acid)
HAZARD CLASS: 8
ID NUMBER: UN3265
PACKING GROUP: III
LABEL STATEMENTS:

IMDG:
PROPER SHIPPING NAME: Corrosive liquid, Acidic, Organic, N.O.S. (Formaldehyde, Acetic Acid)
HAZARD CLASS: 8
ID NUMBER: UN3265
PACKING GROUP: III
LABEL STATEMENTS:

EU ADR/RID:
PROPER SHIPPING NAME: Corrosive liquid, Acidic, Organic, N.O.S. (Formaldehyde, Acetic Acid)
HAZARD CLASS: 8
ID NUMBER: UN3265

PACKING GROUP: III
LABEL STATEMENTS:

SECTION 14 NOTES:

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT): All of the components are listed on the TSCA inventory.

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): The RQ for the product (based on the RQ for Formaldehyde (6% maximum)) of 100 lbs, is 1,666 lbs. Report spills required under federal, state, and local regulations.

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT): This product contains the following chemicals regulated under SARA Section 302: Formaldehyde <4%, Picric Acid

311/312 HAZARD CATEGORIES: Acute Health, Chronic Health

313 REPORTABLE INGREDIENTS: Listed (Formaldehyde, Picric acid) Methanol is below the threshold of 1% for SARA 313 values

Clean Water Act (CWA) 307: No products were found.
Clean Water Act (CWA) 311: Formaldehyde
Clean Air Act (CAA) 112 regulated toxic substances: Formaldehyde

RTK STATES: Picric Acid CAS# 88-89-1 CA, MA, MN, NJ, PA, RI Acetic Acid CAS#64-19-7 CA, MA, MN, NJ, PA, RI Formaldehyde CAS#50-00-0 CA, MA, MN, NJ, PA, RI Methanol CAS# 67-56-1 CA, MA, MN, NJ, PA, RI

CALIFORNIA PROPOSITION 65: This product contains the following chemicals which are known to the State of California to cause cancer, reproductive toxicity or birth defects (developmental toxicity): Formaldehyde <4% (cancer) Methanol (birth defects)

INTERNATIONAL REGULATIONS:
WHMIS CLASSIFICATION: D2A Very Toxic Material
D2B Toxic Material



SECTION 15 NOTES:

SECTION 16: OTHER INFORMATION

PREPARATION INFORMATION: Prepared 9/18/2015

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.

AZER SCIENTIFIC

SDS Safety Data Sheet – Hematoxylin, Weigert's Iron (Part B)

09/2015

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Hematoxylin, Weigert's Iron (Part B)
SYNONYMS: None
PRODUCT CODES: Component of Trichrome Stain Kit (Modified Mason's) ES3398

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: Skin Irritation Category 2; Serious Eye Damage Category 1



Signal Word: Danger!

Hazard Phrases	
H318	Causes serious eye damage.
H315	Causes skin irritation.

Precautionary Phrases	
P280	Wear eye protection/face protection.
P302+P352	IF ON SKIN: 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 so. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.

SECTION 2 NOTES:

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Description: Mixture
*May contain additional non-hazardous proprietary ingredients.
**May contain additional active ingredients at concentrations <1% w/v

INGREDIENT:	**CAS NO.**	**% WT**
Ferric Chloride	10025-77-1	≤1
Hydrochloric Acid (~37%)	7647-01-0	≤1

SECTION 3 NOTES:

SECTION 4: FIRST AID MEASURES

EYES: Thoroughly flush the eyes with large amounts of clean low-pressure water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get immediate medical attention.

SKIN: Immediately flush affected area with plenty of water while removing contaminated clothing. Wash contaminated 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 symptoms worsen.

SECTION 4 NOTES:

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABILITY OF THE PRODUCT:

FLASH POINT: Not available

AUTOIGNITION TEMPERATURE: Not available

NFPA HAZARD CLASSIFICATION
HEALTH: 2 FLAMMABILITY: 0 REACTIVITY: 0
OTHER:

HMIS HAZARD CLASSIFICATION
HEALTH: 2 FLAMMABILITY: 0 REACTIVITY: 0
PROTECTION: C

EXTINGUISHING MEDIA: Use extinguishing material suitable for surrounding fire.

NOT SUITABLE: None known

SPECIAL FIRE FIGHTING PROCEDURES: As with any fire, wear personal protection equipment, including a self-contained breathing apparatus (S.C.B.A.)

SECTION 5 NOTES:

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES:
Small spill and leak: Wear chemical resistant clothing, gloves and eye protection. 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: Wear chemical resistant clothing, gloves and eye protection. Wear NIOSH/MSHA approved breathing apparatus. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container.

SECTION 6 NOTES: Do not allow product to enter drain.

SECTION 7: HANDLING AND STORAGE

HANDLING: Avoid contact with skin and eyes. Wash thoroughly after handling. Avoid breathing vapor.

STORAGE: Store in well ventilated area. Keep container tightly closed. Store at 15-30°C

SECTION 7 NOTES:

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

ENGINEERING CONTROLS: Working areas should be adequately large and well ventilated to prevent concentration of vapors. Provide mechanical exhaust ventilation or other engineering controls to keep airborne concentration of vapors below their respective threshold limits.

RESPIRATORY PROTECTION: Avoid breathing vapor.

EYE PROTECTION: Safety glasses or goggles are required.

SKIN PROTECTION: Chemical resistant gloves are required. Glove material must be resistant to the components of this product.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Protective clothing is required, lab coat or apron.

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. Ensure that eyewash stations and safety showers are close to the workstation location.

EXPOSURE GUIDELINES:

Component	Source	Type	Value	Note
Ferric chloride	OSHA PEL	TWA	1 mg/m^3	
	OSHA PEL	STEL	2 mg/m^3	

SECTION 8 NOTES:

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Orange
ODOR: Odorless
PHYSICAL STATE: Liquid
pH AS SUPPLIED: Unknown
BOILING POINT: Unknown
MELTING POINT / FREEZING POINT: Unknown
VAPOR PRESSURE (mmHg): Unknown
VAPOR DENSITY (AIR = 1): Unknown
EVAPORATION RATE: Unknown
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, static electricity, direct sunlight.

INCOMPATIBILITY (MATERIAL TO AVOID): Metals, allyl chloride, sodium, potassium

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Hydrogen chloride fumes

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
Irritating to skin and mucous membranes.
Serious eye damage/eye irritation
Irritating to eyes
Respiratory or skin sensitization
no data available
Germ cell mutagenicity
no data available
Carcinogenicity
International Agency for Research on Cancer (IARC).
None of the components are listed.
National Toxicology Program (NTP).
None of the components are listed.
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
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.

SECTION 11 NOTES:

SECTION 12: ECOLOGICAL INFORMATION

TOXICITY:
Fish: No relevant studies identified
Crustacea: No relevant studies identified
Algae/Aquatic plants: No relevant studies identified
Other organisms: No relevant studies identified

PERSISTANCE AND DEGRADABILITY: No relevant studies identified
BIOACCUMULATIVE POTENTIAL: No relevant studies identified

MOBILITY IN SOIL: Miscible in water. May spread in water systems.
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 cleanup-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
PROPER SHIPPING NAME:
HAZARD CLASS:
ID NUMBER:
PACKING GROUP:
LABEL STATEMENT:
ENVIRONMENTAL HAZARDS:

AIR TRANSPORTATION: Not Regulated
PROPER SHIPPING NAME:
HAZARD CLASS:
ID NUMBER:
PACKING GROUP:
LABEL STATEMENTS:

OTHER AGENCIES:
Canadian TDG: Not regulated / **Environmental Hazards:** No
EU ADR/RID: Not regulated / **Environmental Hazards:** No
IATA/ICAO: Not regulated / **Environmental Hazards:** No

SECTION 14 NOTES:

SECTION 15: REGULATORY INFORMATION

United States
HCS Classification: Corrosive liquid

U.S. Federal regulations:
TSCA (Toxic Substance Control Act): All of the components are listed on the TSCA 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:

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT):

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

RTK STATES: None of the components are listed.

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 E: Corrosive liquid.

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.

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 9/15/2015 REV1

AZER SCIENTIFIC

SDS Safety Data Sheet – Hematoxylin, Weigert's Iron (Part A)

09/2015

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Hematoxylin, Weigert's Iron (Part A)
SYNONYMS: None
PRODUCT CODES: Component of Trichrome Stain Kit (Modified Mason's)

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; Eye Irritation Category 2A; Skin Irritation Category 2; Specific Target Organ Toxicity (Category 3), CNS



Signal Word: **Danger!**

Hazard Phrases	
H226	Flammable liquid and vapor.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H336	May cause drowsiness and dizziness.

Precautionary Phrases	
P210	Keep away from heat/sparks/open flames/hot surfaces – No smoking
P270	Do not eat, drink, or smoke when using this product.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302+P350	IF ON SKIN: Wash with plenty of soap and water.
P337+P313	If eye irritation persists: Get medical advice/attention.

SECTION 2 NOTES:

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Description: Mixture
*May contain additional non-hazardous proprietary ingredients.
**May contain additional active ingredients at concentrations <1% w/v

INGREDIENT:	CAS NO.	% WT
Ethanol	64-17-5	≤95
Isopropyl Alcohol	67-63-0	≤5
Hematoxylin	517-28-2	≤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 irritation continues.

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. Clean shoes thoroughly before reuse. Get medical attention if irritation develops.

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 medical attention if symptoms worsen.

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, CO2, 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 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: 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. Note: see section 1 for emergency contact information and section 13 for waste disposal.

SECTION 6 NOTES:

SECTION 7: HANDLING AND STORAGE

HANDLING: Do not get in eyes or 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. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. 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. 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 at 15-30°C

SECTION 7 NOTES:

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

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.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Recommended: lab coat

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. Ensure that eyewash stations and safety showers are close to the workstation location.

EXPOSURE GUIDELINES:

Component	Source	Type	Value	Note
Ethyl Alcohol	US (OSHA)	TWA	1000 ppm/1,900 mg/mm3	29 CFR 1910.1000 Table Z-1 Limits for Air Containments
Ethyl Alcohol	US (ACGIH)	STEL	1000 ppm	Upper respiratory tract irritation. Confirmed animal carcinogen with unknown relevance to humans
Isopropyl Alcohol	US (ACGIH)	TWA	200 ppm	
Isopropyl Alcohol	US(OSHA)	TWA	400 ppm	
Isopropyl Alcohol	US(ACGIH)	STEL	400 ppm	

SECTION 8 NOTES:

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Transparent red-brown
ODOR: Characterstic, 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: 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 all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

INCOMPATIBILITY (MATERIAL TO AVOID): Strong oxidizers, silver salts, acid chlorides, alkali metals, metal hydrides, hydrazine

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

HAZARDOUS POLYMERIZATION: No hazardous polymerization

CONDITIONS TO AVOID (POLYMERIZATION): N/A

SECTION 10 NOTES:

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity (Ethyl Alcohol)

LC50 Inhalation	Rat	20000 ppm	10 hours
LC50 Oral	Rat	7060mg/Kg BWT	

LDlo Oral	Human	1400 mg/Kg BWT	

Dermal LD50
no data available
Other information on acute toxicity
no data available
Skin corrosion/irritation
Irritating to skin and mucous membranes.
Serious eye damage/eye irritation
Irritating to the eye.
Respiratory or skin sensitization
no data available
Germ cell mutagenicity:
no data available
Carcinogenicity:

International Agency for Research on Cancer (IARC).

None of the components are listed.

National Toxicology Program (NTP).

None of the components are listed.

Although not listed above, this stain is suspected of causing cancer.

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 Causes respiratory tract irritation.
Ingestion Harmful if swallowed.
Skin May cause skin irritation.
Eyes Causes eye irritation.
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.

ACUTE HEALTH HAZARDS: See above, potential health effects.

TARGET ORGANS: Central nervous system

SECTION 11 NOTES:

SECTION 12: ECOLOGICAL INFORMATION

Toxicity
no data available
Persistence and degradability
no data available
Bioaccumulative potential
no data available
Mobility in soil
Miscible in water. May spread in water systems. This component is non-volatile
PBT and vPvB assessment
no data available
Other adverse effects
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

PROPER SHIPPING NAME: Ethanol solutions
HAZARD CLASS: 3
ID NUMBER: UN1170
PACKING GROUP: II
LABEL STATEMENT: Flammable liquid

AIR TRANSPORTATION (IATA)

PROPER SHIPPING NAME: Ethanol solutions
HAZARD CLASS: 3
ID NUMBER: UN1170
PACKING GROUP: II
LABEL STATEMENT:

IMDG:

PROPER SHIPPING NAME: Ethanol solutions
HAZARD CLASS: 3
ID NUMBER: UN1170
PACKING GROUP: II
LABEL STATEMENT:

EU ADR/RID:

PROPER SHIPPING NAME: Ethanol solutions
HAZARD CLASS: 3
ID NUMBER: UN1170
PACKING GROUP: II

Environmental Hazards: Marine Pollutant: No

SECTION 14 NOTES:

SECTION 15: REGULATORY INFORMATION

United States
HCS Classification: Flammable liquid, Highly toxic material, Irritating material
U.S. Federal regulations:
United States inventory (TSCA 8b):
TSCA 8(d) H and S data reporting:
TSCA (Toxic Substance Control Act): All components are listed on the TSCA 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: Ethyl Alcohol
SARA 311/312 MSDS distribution - chemical inventory - hazard identification:
Ethyl Alcohol: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard
Clean Water Act (CWA) 307

Clean Water Act (CWA) 311
Clean Air Act (CAA) 112 accidental release prevention: No products were found.
Clean Air Act (CAA) 112 regulated flammable substances: No products were found.
Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

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

States RTK: Ethyl Alcohol CAS# 64-17-5 PA, MA, NJ, RI Isopropyl Alcohol CAS#67-63-0 NJ, PA, MA, RI
Hematoxylin CAS#517-28-2 PA, NJ

California Prop. 65
This product does not contain any chemicals 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).

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.

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 09/23/2015 REV1