SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Gentian Violet Solution
SYNONYMS: None
PRODUCT CODES: Component of McDonalds Gram Stain kit ES3404

MANUFACTURER: Azer Scientific, Inc.
ADDRESS: 701 Hemlock Rd, Morgantown, PA 19543

CHEMTREC PHONE: 800-424-9300
SUPPORT: 610-524-5810
FAX: 610-901-3046

PRODUCT USE: Biological Stain
PREPARED BY: CB

SECTION 1 NOTES:

SECTION 2: HAZARDS IDENTIFICATION

GHS CLASSIFICATION: Flammable liquid Category 3; Eye Irritation Category 2A; Carcinogenicity Category 2; Acute Aquatic Toxicity Category 2; Chronic Aquatic Toxicity Category 2

Signal Word: Warning!

Hazard Phrases	
H226	Flammable liquid and vapor.
H351	Suspected of causing cancer.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.

Precautionary Phrases	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P308+P313	IF exposed or concerned: 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
Isopropyl Alcohol	67-63-0	≤3
Ethanol	64-17-5	≤17
C.I. Basic Violet*	548-62-9	≤2.0
Ammonium Oxalate	6009-70-7	≤0.8
Water	7732-18-5	Balance

SECTION 3 NOTES: * Listed on the Candidate List of Substances of Very High Concern (SVHC) (Regulation (EC) No. 1907/2006)

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 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
FLASH POINT: Not available
AUTOIGNITION TEMPERATURE: Not available

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

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

EXTINGUISHING MEDIA: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
NOT SUITABLE: Do not use water jet.
SPECIAL FIRE FIGHTING PROCEDURES: Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst with the risk of a subsequent explosion. Run-off to sewer may create fire or explosion hazard.
HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon expected to be the primary combustion product.

SECTION 5 NOTES: Development of hazardous combustion gases or vapors possible in the event of fire.

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.

SECTION 6 NOTES:

SECTION 7: HANDLING AND STORAGE

HANDLING: Do not get in eyes, on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated.

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 CONTROL/PERSONAL PROTECTION

ENGINEERING CONTROLS: General mechanical ventilation or laboratory fume hood. Ensure that eyewash stations and quick drench showers are close to the workstation.
RESPIRATORY PROTECTION: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
EYE PROTECTION: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. Recommended: splash goggles
SKIN PROTECTION: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: lab coat
HANDS: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Recommended: Neoprene
ENVIRONMENTAL EXPOSURE CONTROLS: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
WORK HYGIENIC PRACTICES: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

EXPOSURE GUIDELINES:

OSHA Permissible Exposure Limits (PELs):

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

ACGIH Threshold Limit values (TLVs):

Reagent	CAS#	ACGIH PEL TWA	ACGIH STEL	Note

Ethyl Alcohol	64-17-5		1000 ppm	Upper respiratory tract irritation. Confirmed animal carcinogen with unknown relevance to humans
Isopropyl Alcohol	67-63-0	200 ppm	400 ppm	

SECTION 8 NOTES:

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Dark purple
ODOR: Mild alcohol odor
PHYSICAL STATE: liquid
pH AS SUPPLIED: Basic
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 heat, sparks, flames, and all other sources of ignition.
INCOMPATIBILITY (MATERIAL TO AVOID): Oxidizing agents, strong acids and bases.
HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: oxides of carbon, nitrogen and sulfur
HAZARDOUS POLYMERIZATION: No hazardous polymerization
CONDITIONS TO AVOID (POLYMERIZATION): N/A

SECTION 10 NOTES:

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity

Numerical Measures: 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 serious 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.
TARGET ORGANS: Not available

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: Biodegradation is expected
BIOACCUMULATIVE POTENTIAL: Bioaccumulation is unlikely.
MOBILITY IN SOIL: No data available
PBT and vPvB ASSESSMENT: Not required.

SECTION 12 NOTES:

SECTION 13: DISPOSAL CONSIDERATIONS

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

SECTION 13 NOTES:

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION

UN No.	UN1993
Proper Shipping Name	Flammable liquids, n.o.s. (Ethanol)
Hazard Class	3
Packing Group	III

IATA

UN No.	UN1993
Proper Shipping Name	Flammable liquids, n.o.s. (Ethanol)
Hazard Class	3
Packing Group	III

IMDG: UN Number: 1993 Class: 3 Packing group: III EMS-No: F-E, S-E
Canadian TDG: UN No. 1993 Class 3 (6.1) Packing group III
Proper shipping name: Ethanol solutions
EU ADR/RID: UN Number: 1993 Class: 3 Packing group: III

SECTION 15: REGULATORY INFORMATION

United States
HCS Classification: Flammable liquid, Toxic material, Irritating material, Aquatic toxicity

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: Ethyl alcohol
SARA 311/312 MSDS distribution - chemical inventory - hazard identification:
Ethanol: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard
SARA 313 Form R – Reporting: No products were found.

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

RTK STATES: Ethanol CAS# 64-17-5: PA, NJ, MA, RI Isopropyl Alcohol CAS# 67-63-0 MA, PA, NJ
C.I. Basic violet 3 CAS#548-62-9 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.

CANADA

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

Canadian lists:
CEPA Toxic substances: The following components are listed: 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.

SECTION 16: OTHER INFORMATION

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

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

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