

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Gram Decolorizer Solution

**SYNONYMS:** None

**PRODUCT CODES:** ES37412, ES37414, ES37416, Component of McDonald's 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:** Laboratory Reagent

**PREPARED BY:** CB

### SECTION 1 NOTES:

## SECTION 2: HAZARDS IDENTIFICATION

**GHS CLASSIFICATION:** Flammable liquid Category 2; Skin Corrosion/Irritation Category 2; Serious eye damage/irritation Category 2A; Specific Target Organ Toxicity - single exposure Category 3



**Signal Word:** Danger!

Hazard Phrases	
H225	Highly flammable liquid and vapor.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335+H336	May cause respiratory irritation, and drowsiness or dizziness.

Precautionary Phrases	
P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P261	Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P280	Wear protective gloves/ 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.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P307+P311	IF exposed: Call a POISON CENTER or doctor/ physician.

### SECTION 2 NOTES:

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<b>INGREDIENT:</b>	<b>CAS NO.</b>	<b>% WT</b>
Ethanol	64-17-5	≤42
Isopropyl Alcohol	67-63-0	<4
Acetone	67-64-1	≤50

**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 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 symptomatic.

**SECTION 4 NOTES:**

**SECTION 5: FIRE-FIGHTING MEASURES**

**FLAMMABILITY OF THE PRODUCT:** Flammable liquid

**FLASH POINT:** 12.2°C (54°F) Closed cup

**AUTOIGNITION TEMPERATURE:** Not available

**NFPA HAZARD CLASSIFICATION**

**HEALTH:1 FLAMMABILITY: 3 REACTIVITY: 0**

**OTHER:**

**HMIS HAZARD CLASSIFICATION**

**HEALTH:1 FLAMMABILITY: 3 REACTIVITY: 0**

**PROTECTION: B**

**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:** 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.

**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 <sup>3</sup> )	29 CFR 1910.1000 Table Z-1 Limits for Air Containments
Isopropyl Alcohol	67-63-0	400ppm	
Acetone	67-64-1	1000 ppm 8 hour(s)	

**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	400ppm (983 mg/m <sup>3</sup> )	500ppm (1230 mg/m <sup>3</sup> )	
Acetone	67-64-1	500 ppm 8 hour(s)	750 ppm 15 minute(s)	

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

**APPEARANCE:** Clear  
**ODOR:** 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 heat, sparks, flames, and all other sources of ignition.  
**INCOMPATIBILITY (MATERIAL TO AVOID):** Oxidizing agents, strong acids and bases.  
**HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:** Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: oxides of carbon.  
**HAZARDOUS POLYMERIZATION:** No hazardous polymerization  
**CONDITIONS TO AVOID (POLYMERIZATION):** N/A

**SECTION 10 NOTES:**
**SECTION 11: TOXICOLOGICAL INFORMATION**
**Acute toxicity**

**Oral:** Ethyl alcohol: LC50 (Oral, rat) = 7060 mg/kg BWT, LDlo (Oral, human) = 1400mg/kg BWT  
 Acetone: LD50 (Rat) 5800 mg/kg  
 Isopropyl alcohol: LD50 (oral, rat) = 5,045 mg/kg  
**Inhalation:** Ethyl Alcohol: LC50 (Inhalation, rat) = 20,000 ppm, 10hrs  
 Acetone: LC50 (rat) 76 mg/l, 4 h  
 Isopropyl Alcohol: LC50 (Inhalation, rat) = 87.6 mg/k 8 hrs  
**Dermal LD50:** Acetone: Rat > 7400 mg/kg  
 Isopropyl Alcohol: Rabbit LD50 =12,800 mg/kg

**Skin corrosion/irritation:** Ethyl Alcohol: Draize test, rabbit, skin: 20 mg/24H Moderate  
**Eyes:** Ethyl alcohol: Draize test, rabbit, eye: 500 mg/24H Reaction - Mild Rabbit, eye: 500 mg Reaction - Severe  
Isopropyl Alcohol: Mildly irritating to the eye at airborne concentrations of 400 ppm, unpleasant at 800 ppm.  
**Germ cell mutagenicity:** no data available  
**Carcinogenicity:** No components are classified as human carcinogen.  
**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** Harmful if inhaled. Causes respiratory tract irritation.  
**Ingestion** Toxic if swallowed.  
**Skin** Toxic if absorbed through skin. Causes skin irritation.  
**Eyes** Causes eye irritation.  
**Signs and Symptoms of Exposure**  
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:** Kidney, Liver, Heart, Central nervous system

**SECTION 11 NOTES:**

**SECTION 12: ECOLOGICAL INFORMATION**

**TOXICITY:**

Ethyl Alcohol 64-17-5

Acute Fish Toxicity:

LC50 / 96 HOUR *Oncorhynchus mykiss* (rainbow trout) >10,000 mg/l

LC50 / 96 HOUR *Pimephales promelas* (fathead minnow) > 13,400 mg/l

Toxicity to Aquatic Plants:

Growth Inhibition / 96 HOURS *Chlorella vulgaris* (fresh water algae) 1,000 mg/l

Toxicity to microorganisms:

Toxicity Threshold / *Pseudomonas putida* 6,500 mg/l Summary: Inhibition of cell multiplication begins.

Isopropyl Alcohol 67-63-0

Acute Fish Toxicity:

LC50 / 96 hours *Pimephales promelas*: 9,640 mg/L

Toxic to *Daphnia* and Other Aquatic Invertebrates:

EC50 / 24 h / Water Flea - 5,102 mg/L

Toxicity to Aquatic Plants EC50 / 72 hours *Desmodium subspicatus* > 2,000 mg/L

Toxicity to *Daphnia* and other aquatic invertebrates:

Immobilization EC50 / 24 h / Water Flea - 6,851 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. Spent product or spill clean up-follow all provincial, local, state, and federal regulations.

RCRA HAZARD CLASS: Not classified

SECTION 13 NOTES:

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION

**UN No.** UN1993 (subject to LTD QTY)  
**Proper Shipping Name** Flammable liquid, n.o.s (Ethanol, Acetone)  
**Hazard Class** 3  
**Packing Group** II

TDG

**UN No.** UN1993  
**Proper Shipping Name** FLAMMABLE LIQUID, N.O.S. (Ethanol, Acetone)  
**Hazard Class** 3  
**Subsidiary Hazard Class** 6.1  
**Packing Group** II

IATA

**UN No.** UN1993  
**Proper Shipping Name** Flammable liquid, n.o.s (Ethanol, Acetone)  
**Hazard Class** 3  
**Packing Group** II

IMDG/IMP

**UN No.** UN1993  
**Proper Shipping Name** FLAMMABLE LIQUID, N.O.S. (Ethanol, Acetone)  
**Hazard Class** 3  
**Packing Group** II

SECTION 15: REGULATORY INFORMATION

United States

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

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:**

Acetone: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard;

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

**SARA 313 Form R - Reporting:**

DEA List I & II Chemicals

(Precursor Chemicals): Listed

RTK STATES: Ethyl Alcohol CAS#64-17-5 MA, PA, NJ, RI, FL Isopropyl Alcohol 67-63-0 NJ, PA, MA  
Acetone CAS#67-64-1 MA, PA, NJ, RI, NY

**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.

**Canadian lists:**

**CEPA Toxic substances:** The following components are listed: Ethanol;  
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.

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