SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Acid Alcohol, 0.5%
SYNONYMS: None
PRODUCT CODES: ES824, ES825, ES826

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, Serious eye damage/Eye irritation Category 2B, Skin Irritation Category 2, 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 eye irritation.
H335 + H336	May cause respiratory irritation, and drowsiness, or dizziness.
EUH066	Repeated exposure may cause skin dryness or cracking.

Precautionary Phrases	
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking
P261	Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

SECTION 2 NOTES:

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT:	**CAS NO.**	**% V**
Ethanol	**64-17-5**	**~66.5**
Methanol	**67-56-1**	**~3.5**
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 immediately.

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 immediately

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: closed cup: 11.667°C (53°F)

AUTOIGNITION TEMPERATURE: Not Available

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

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

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.

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**
Methanol `	**ACGIH TLV (United States, 3/2012).** TWA: 200 ppm 8 hour(s). TWA: 262 mg/m³ 8 hour(s). STEL: 250 ppm 15 minute(s). STEL: 328 mg/m³ 15 minute(s). **OSHA PEL 1989 (United States, 3/1989).** TWA: 200 ppm 8 hour(s). TWA: 260 mg/m³ 8 hour(s). STEL: 250 ppm 15 minute(s). STEL: 325 mg/m³ 15 minute(s). **NIOSH REL (United States, 1/2013).** TWA: 200 ppm 10 hour(s). TWA: 260 mg/m³ 10 hour(s). STEL: 250 ppm 15 minute(s). STEL: 325 mg/m³ 15 minute(s). **OSHA PEL (United States, 6/2010).** TWA: 200 ppm 8 hour(s). TWA: 260 mg/m³ 8 hour(s).
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

SECTION 8 NOTES:

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear, colorless

ODOR: Characteristic

PHYSICAL STATE: liquid

pH AS SUPPLIED: N/A

BOILING POINT: 79°C

MELTING POINT: N/A

FREEZING POINT: Not Available

VAPOR PRESSURE (mmHg): Not avaialble

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: 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

Oral LD50
no data available
Inhalation LC50
no data available
Dermal LD50
no data available
Other information on acute toxicity
no data available
Skin corrosion/irritation
no data available
Serious eye damage/eye irritation
Eyes: no data available
Respiratory or skin sensitization
no data available
Germ cell mutagenicity
no data available
Specific target organ toxicity - single exposure (Globally Harmonized System)
no data available
Specific target organ toxicity - repeated exposure (Globally Harmonized System)
no data available
Aspiration hazard
no data available

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: Toxic if absorbed through skin. Causes skin irritation.

INGESTION: Toxic if swallowed.

INHALATION: Toxic if inhaled. 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
no data available
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: Flammable liquids, n.o.s. (Ethanol/Methanol)
HAZARD CLASS: 3
ID NUMBER: UN1993
PACKING GROUP: II
LABEL STATEMENT:
ENVIRONMENTAL HAZARDS: No

AIR TRANSPORTATION
PROPER SHIPPING NAME: Flammable liquids, n.o.s. (Ethanol/Methanol)
HAZARD CLASS: 3
ID NUMBER: UN1993

PACKING GROUP: II
LABEL STATEMENTS:

OTHER AGENCIES:
IMDG: UN Number: 1993 Class: 3 Packing group: II EMS-No: F-E, S-E

Canadian TDG: UN No. 1993 Class 3 (6.1) Packing group II
Proper shipping name Flammable liquid

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: 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, Methanol
SARA 311/312 MSDS distribution - chemical inventory - hazard identification:
Ethyl Alcohol: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard
Methanol:Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard

SARA 313

Form R Reporting requirements:	**Product name**	**CAS number**	**Concentration**
Requirements:	Methanol	67-56-1	99-100
Supplier Notifiction:	Methanol	67-56-1	99-100

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
Connecticut Carcinogen Reporting: None of the components are listed.
Connecticut Hazardous Material Survey: None of the components are listed.
Florida substances: None of the components are listed.
Illinois Chemical Safety Act: None of the components are listed.
Illinois Toxic Substances
Disclosure to Employee Act: None of the components are listed.
Louisiana Spill: None of the components are listed.
Louisiana Reporting: None of the components are listed.
Massachusetts Spill: None of the components are listed.
Massachusetts Substances: The following components are listed: Ethyl Alcohol; Methanol
Minnesota Hazardous Substances: None of the components are listed.
Michigan Critical Material: None of the components are listed.
New Jersey Toxic Catastrophe Prevention Act: None of the components are listed.
New Jersey Spill: None of the components are listed.
New Jersey Hazardous Substances: The following components are listed: Ethyl Alcohol; Methanol
New York Toxic Chemical Release Reporting: None of the components are listed.
New York Acutely Hazardous Substances: None of the components are listed
Pennsylvania RTK Hazardous Substances: The following components are listed: Ethyl Alcohol; Methanol
Rhode Island Hazardous Substances: 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.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Acceptable dosage				
Methanol	No.	Yes.	No.	No.

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; Methanol; Volatile organic compounds
Alberta Designated Substances: None of the components are listed.
Ontario Designated Substances: None of the components are listed.
Quebec Designated Substances: None of the components are listed.

CEPA DSL / CEPA NDSL: All components are listed or exempted.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the 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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