

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Acid Alcohol 1.0%

SYNONYMS: None

PRODUCT CODES: Component of Stain Kits: ES4808-Fite's Stain Kit ES4820-Trichrome Stain Kit

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; 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.
P261	Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P264	Wash hands thoroughly after handling.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
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

<u>INGREDIENT:</u>	<u>CAS NO.</u>	<u>% WT</u>
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Ethanol	64-17-5	≤65
IPA	67-63-0	≤4
Hydrochloric Acid	7647-01-0	1.0
Water	7732-18-5	balance

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. 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

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: 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:

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)	
Hydrochloric Acid	7647-01-0	5 ppm Ceiling	

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	
Hydrochloric Acid	7647-01-0	7 ppm Ceiling		

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, hydrogen chloride

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

Hydrochloric Acid: LD50 (oral, rat) = 700 mg/kg

Inhalation: Ethyl Alcohol: LC50 (Inhalation, rat) = 20,000 ppm, 10hrs

Dermal LD50: Hydrochloric Acid: Rabbit LD50 = 5,010 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

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

Potential health effects

Inhalation Harmful if inhaled. Causes respiratory tract irritation.

Ingestion Toxic 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.

TARGET ORGANS: Kidney, Liver, Heart, Central nervous system

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: 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.	UN1170
Proper Shipping Name	Ethanol Solutions
Hazard Class	3
Packing Group	II

IATA

UN No. UN1170
Proper Shipping Name Ethanol Solutions
Hazard Class 3
Packing Group II

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 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:

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

SARA 313 Form R - Reporting:

	Component	Concentration
Requirements:	Ethanol	90%
Supplier notification:	Ethanol	90%

DEA List I & II Chemicals

(Precursor 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

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-2B: Material causing other toxic effects.

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.

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