



American International Chemical, Inc.

Corporate Offices: (800) 238-0001

Internet: www.aicma.com Email: info@aicma.com

MATERIAL SAFETY DATA SHEET

0.5M 5-(ETHYLTHIO)-1H-TETRAZOLE IN ACETONITRILE

SECTION 1 - CHEMICAL PRODUCT AND COMPANY INFORMATION

American International Chemical, Inc. 135 Newbury Street Framingham, MA 01701	Emergency Number: Chemtrec Information Number:	800-424-9300 703-527-3887 800-238-0001
---	---	--

Date: August 2007

Synonyms: Activator Solution

CAS #: Not Applicable

DOT Hazard Class: Acetonitrile Solution
3, UN1648, II

SECTION 2 - COMPOSITION AND INFORMATION ON INGREDIENTS

Component	CAS #	% (V/V)
Acetonitrile	75-05-8	92%
5-(Ethylthio)-1H-tetrazole	89797-68-2	8%

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Poison. Extremely flammable liquid and vapor. Vapor may cause flash fire. Harmful if inhaled, swallowed or absorbed through the skin. Contains material which causes damage to the following organs: Kidneys, liver, respiratory tract, skin, central nervous system, eye, lens or cornea. May cause respiratory tract, eye and skin irritation.

POTENTIAL HEALTH EFFECTS:

Skin: May cause irritation.

Eyes: May cause irritation or burning.

Inhalation: May cause irritation to the respiratory tract.

Ingestion: May cause irritation or burning.

CARCINOGENICITY: Not listed as a cancer causing agent.

SECTION 4 - FIRST AID MEASURES

Skin: Immediately wash skin with soap and water for at least 15 minutes.

0.5M 5-(ETHYLTHIO)-1H-TETRAZOLE IN ACETONITRILE

1 of 5

Eyes: Immediately flush with plenty of water for at least 15 minutes, holding eye lids apart.
Inhalation: Remove to the fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.
Ingestion: Wash out mouth with water. Do not induce vomiting; if conscious, give water and get medical attention.
On All Of The Above: Consult a physician if symptoms persist.

SECTION 5 - FIRE FIGHTING MEASURES

Flash Point: 45° F (Acetonitrile)

Flammable Limits: The greatest known range is Lower: 3% Upper: 16% (Acetonitrile)

Products of combustion: Carbon, nitrogen and sulfur oxides.

Extinguishing Media: Small Fires: Use Dry Chemical Powder. Large fires: Use alcohol foam, water spray or fox. Use water to cool fire-exposed containers and disperse vapors.

Special Fire Fighting Procedures: All firefighters should use self-contained breathing apparatus and full fire-fighting turn-out gear.

Unusual Fire Explosion Hazard: Highly flammable in the presence of open flames, sparks or static discharge, of shocks, of heat, of oxidizing materials. Risk of explosion of the product in presence of static discharge. Vapor may travel considerable distance to source of ignition and flash back. (Acetonitrile)

Auto Ignition Temperature: The lowest known value is 975.3° F (Acetonitrile).

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Isolate hazard area and deny entry to unnecessary or unprotected personnel.

Wear suitable protective equipment listed under Exposure Controls, Personal Protection below.

Eliminate any ignition sources until the area is determined to be free from explosion or fire hazards.

Contain spilled liquid with inert material, sand or earth. Place in a disposal container. Avoid runoff into storm sewers and ditches which lead to waterways

SECTION 7 - HANDLING AND STORAGE

Avoid contact with skin, eyes and clothing. Use with adequate ventilation. Use normal personal hygiene and housekeeping. Keep container closed. Store in cool dry area well ventilated away from ignition sources.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

RESPIRATORY PROTECTION: Use NIOSH/MSHA approved respirators.

Section 8 Continued:

VENTILATION REQUIREMENTS: Use in an approved fume hood or with adequate ventilation.

SKIN AND EYE PROTECTION: Use PVA or equivalent gloves, chemical goggles and clothing sufficient to protect skin.

WORK, HYGIENIC PRACTICES:

Safety showers and/or eye wash should be available. Do not leave food or smoke in work area. Wash thoroughly and remove or clean any contaminated clothing.

EXPOSURE LIMITS:

OSHA – PEL:

Component	TWA		STEL		CL	
	PPM	MG/M ³	PPM	MG/M ³	PPM	MG/M ³
Acetonitrile	40	70	60	105		
5-(Ethylthio)-1H-Tetrazole	Not Available					

ACGIH-TLV:

Component	TWA		STEL		CL	
	PPM	MG/M ³	PPM	MG/M ³	PPM	MG/M ³
Acetonitrile	40	67	60	101		
5-(Ethylthio)-1H-Tetrazole	Not Available					

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: 179.1° F (Acetonitrile)

Vapor Pressure (MM Hg): 72.8 (Acetonitrile)

Vapor Density (AIR=1): 1.42 (Acetonitrile)

Specific Gravity (H₂O=1): 0.787 (Acetonitrile)

Percent Volatile by Volume (%): 100% (Acetonitrile)

Melting Point: -43.3° F (Acetonitrile)

Evaporation Rate (Butyl Acetate=1): 2.33 (Acetonitrile)

Solubility in Water: Soluble

pH: Not Available

SECTION 10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under normal temperatures and pressures.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: Not available.

KEEP AWAY FROM: Heat, contact with ignition sources. Highly reactive with oxidizing agents, reducing agents, acids and alkalis.

SECTION 11 - TOXICOLOGICAL INFORMATION

RTECS Number – Acetonitrile – AL7700000
5-(Ethylthio)-1H-Tetrazole – Not Available

Acute oral toxicity (LD50): 50 mg/kg (Rabbit) (Acetonitrile)

Chronic Effects on humans – Not Available

SECTION 12 - ECOLOGICAL INFORMATION

Not Available

SECTION 13 - DISPOSAL CONSIDERATIONS

Dispose of in accordance with all federal, state and local regulations.

RCRA WASTE #: 4003

SECTION 14 - TRANSPORTATION INFORMATION

D.O.T. SHIPPING NAME: Acetonitrile Solution
TECHNICAL SHIPPING NAME: SAME
U.N./NUMBER: UN1648
D.O.T. HAZARD CLASS AND GROUP NUMBER: 3, II
RQ: 5000 lbs
D.O.T. PLACARD: Flammable
PRODUCT LABEL: 0.5M ETT Solution
OTHER INFORMATION: None.

SECTION 15 - REGULATORY INFORMATION

OSHA STATUS: Not Known

TSCA STATUS: This product is a mixture. The CAS numbers of all components are listed on the TSCA inventory.

CERCLA REPORTABLE REQUIREMENTS: (RQ)

Acetonitrile – 5000

SARA TITLE III INFORMATION:

Section 302 Extremely Hazardous Substance Acetonitrile

Section 313 Toxic Chemicals: Acetonitrile

Section 311/312 Hazard Category: Acetonitrile: Fire hazard, Immediate (Acute) Health Hazard,
Delayed (Chronic) Health Hazard.

SECTION 16 - OTHER INFORMATION

Reason for issue: New Product

This information is given without any warranty or representation. It is believed to be correct but does not claim to be all inclusive and shall be used only as a guide. American International Chemical, Inc., shall not be held liable for any damage resulting from handling or contact with the above product. It is offered solely for your consideration, investigation and verification.