

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Acetone

SYNONYMS: 2-Propanone, β -Keptopropane, Dimethylformadlehyde, Dimethyl Ketone, Methyl Ketone, Propanonene, Pyroacetic Ether

PRODUCT CODES: ES600, ES17402-500ML, ES17402-1L, ES17402-4L

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, Solvent

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.
P340+P340	IF INHALED: Remove person to fresh air and keep in a position comfortable for breathing.
P307+P311	IF exposed: Call a POISON CENTER or doctor/ physician.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P370+P378	In case of fire: Use dry chemical, alcohol foam, carbon dioxide or water spray to extinguish.

SECTION 2 NOTES:

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENT:</u>	<u>CAS NO.</u>	<u>% WT</u>
Acetone	67-64-1	>99

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: Class IB Flammable Liquid

FLASH POINT: CLOSED CUP: -20°C / -4°F

AUTOIGNITION TEMPERATURE: 465°C (869°F)

NFPA HAZARD CLASSIFICATION

HEALTH:1 FLAMMABILITY: 3 REACTIVITY: 0

OTHER:

HMIS HAZARD CLASSIFICATION

HEALTH:1 FLAMMABILITY: 3 REACTIVITY: 0

PROTECTION:

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. 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 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
Acetone	67-64-1	1000 ppm 8 hour(s)	

ACGIH Threshold Limit values (TLVs):

Reagent	CAS#	ACGIH PEL TWA	ACGIH STEL	Note
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: Fragrant, mint like

PHYSICAL STATE: liquid

pH AS SUPPLIED: 7

BOILING POINT: 56°C (133°F)

MELTING POINT/FREEZING POINT: -95°C (-140°F)

VAPOR PRESSURE (mmHg): 180 mmHg

VAPOR DENSITY (AIR = 1): 2.00

EVAPORATION RATE (Butyl acetate=1): 7.7

SOLUBILITY IN WATER: Soluble in water

MOLECULAR WEIGHT: 58.1

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): Chloroform, Chromic anhydride, Nitric compounds, 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 LD50: Rat LD50 5.8g/kg

Mouse LD50 3g/kg

 Human TD_{LO} 2.9 g/kg (coma)

Inhalation LC50: Mouse LC50 46,420 ppm (62 min.)

Rat LC50 50,100 ppm (8 hr.)

 Human TC_{LO} 500 ppm for eye and throat irritation

Dermal LD50: Guinea pig LD50 >9400 ul/kg

Eye corrosion/irritation: Draize test - Rabbit 20 mg- Severe

Skin corrosion/irritation: Draize test - Rabbit 500 mg/25 hr.- Mild

Carcinogenicity:

Acetone: NIOSH: Not classifiable as a human carcinogen ACGIH: Not classifiable as a human carcinogen
NTP: Not classifiable as a human carcinogen IARC: Not classifiable as a human carcinogen

Aspiration hazard: no data available

Potential health effects

Inhalation: Harmful if inhaled. Causes respiratory tract irritation.

Ingestion: Toxic if swallowed.

Skin: Harmful if absorbed through skin. Causes skin irritation.

Eyes: Causes eye irritation.

Signs and Symptoms of Exposure

Irritation eyes, nose, throat; headache, dizziness, central nervous system depression; dermatitis

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:

LC50 Daphnia magna 10mg/L 24 to 48 Hr

LC50 Lepomis macrochirus (bluegill sunfish) 8,300 mg/L 96 hr

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. UN1090

Proper Shipping Name Acetone

Hazard Class 3

Packing Group II

Limited quantity equal to or less than 1 L per DOT

TDG

UN No. UN1090

Proper Shipping Name Acetone

Hazard Class 3

Packing Group II

IATA

UN No. UN1090

Proper Shipping Name Acetone
Hazard Class 3
Packing Group II

IMDG/IMP

UN No. UN1090
Proper Shipping Name Acetone
Hazard Class 3
Packing Group II
EMS-No: F-E, S-E

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;

SARA 313 Form R - Reporting:

CERCLA: CAS# 67-64-1; 5000 lb. final RQ; 2270 kg final RQ

DEA List I & II Chemicals

(Precursor Chemicals): Listed

RTK STATES: Acetone CAS#67-64-1 MA, PA, NJ, RI, NY

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-1A: Material causing immediate and toxic effects.

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: 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.

PREPARATION INFORMATION: Prepared 11/05/2015 REV1

Reviewed 06/26/2017

Revision 2: Added GHS storage and fire response precautionary phrases, DOT shipping LTD quantity exception. 09/20/2018