

Owner	DOC. NO.	REV. 2	DATE	
C.H.O	SOP		12/9/19	
DOC. TITLE SOP FOR ACETONITRILE				

Environmental Health & Safety

STANDARD OPERATING PROCEDURES (SOP) FOR WORKING WITH <u>ACETONITRILE</u> AT AMHERST COLLEGE

Acetonitrile is a commonly used organic solvent that is colorless and has a sweet aromatic odor. It is a very flammable compound.

Acetonitrile is widely used in laboratories as a solvent, due to its medium polarity and miscibility with a wide range of other solvents. In industry, it is used in the the manufacture of pharmaceuticals and photographic film

Personal Protective Equipment

When working with Acetonitrile, the following Personal Protective Equipment (PPE) must be worn:

Splash goggles

Lab coat

Long pants

Close toed shoes

Nitrile gloves (change gloves as often as needed)

Safety Devices

Fume hood – always work with Acetonitrile in a fume hood to prevent exposure by inhalation

Identify the location of all the safety devices in the room before beginning your procedure. Also, familiarize yourself with all the possible means of egress

Specific Health Hazards

Note that the exposure limit for this compound is relatively low.

Throughout an eight-hour workday, personnel $\underline{\text{shall not}}$ be exposed to more than 20ppm (20mg/L) $\underline{\text{on}}$ average (Time Weighted Average, TWA)

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Exposure to Acetonitrile may cause respiratory difficulties and lead to disturbances in heart rate

SOP FOR ACETONITRILE



Pictogram:

Hazards: Flammable, Toxic

Routes of Entry

Inhalation, skin/eye contact

If any part of your body comes in contact with Acetonitrile, call the Amherst College Police Department at 413-542-2111. Also call this number if you begin to feel ill after working with or in the vicinity of this compound

Inhalation

If inhaled, move to fresh air, and get help. Call x2111 to report if you begin to feel ill.

Eye contact

Use eyewash to flush eyes with water for at least 15 minutes.

Skin Contact

Call the Amherst College Police Department (x2111).

Wash skin with plenty of water. Use safety shower, if needed.

Storage and Special Handling

Store in a tightly closed container in a cool, dry area that is well ventilated, such as a flammable cabinet. Do not store on shelf in quantities more than 1L.

Store away from: ignition sources, oxidizers, open flames, strong acids, strong bases

Label all solutions of Acetonitrile with the words: "danger" and "flammable"

If you have Acetonitrile that you no longer need, please contact Jason Williams, x2736, for disposal

Spill clean up

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Do not attempt to clean up a spill if you are not comfortable

If a spill of <u>less than 100ml</u> occurs, use absorbent spill pad (found in spill kit) or paper towel to absorb the liquid. Rinse the surface with water after absorption. Please wear recommended personal protective equipment while cleaning up the spill. Clean-up materials should be placed in a solid waste container.

For spills more than 100ml, contact Jason Williams (x2736) or call Amherst College Police Department (x2111)

Disposal

Disposable pipets, pipet tips, other disposable devices, such as gloves, that come in contact with acetonitrile may be disposed of into the regular trash, provided that they are dry and not grossly contaminated. Otherwise, they shall be disposed of as hazardous waste

Acetonitrile may be disposed of with other non-halogenated aqueous waste (but only if compatible). If you have acetonitrile that you no longer need, contact the Chemical Hygiene officer

Questions

Contact Jason Williams or Environmental Health and Safety if you have any questions about this SOP or this compound.