

Principal Investigator: _____

Date Approved: _____




This document covers basic chemical safety information for acrylonitrile. The use of acrylonitrile is subject to pre-approval by the Principal Investigator (PI) and/or Supervisor. PI and/or Supervisor may use the sheet attached to this SOP to document any lab specific training for Acrylonitrile. **DO NOT USE ACRYLONITRILE UNTIL YOU HAVE OBTAINED THE NECESSARY PRE-APPROVAL.**

Acrylonitrile

Acrylonitrile (also called vinyl cyanide) is a highly flammable chemical. It is toxic if inhaled, ingested or absorbed through skin.

It can undergo explosive polymerization when exposed to heat, light, strong acid, or strong bases. Acrylonitrile is also carcinogenic and a reproductive toxicant.



Personal Protective Equipment & Personnel Monitoring		
 Lab Coat	 Gloves	 Eye Protection
Flame resistant lab coat.	Chloroprene gloves when handling small quantities. Use thicker butyl-rubber gloves for larger volumes.	ANSI Z87.1-compliant safety goggles, or face shield if a splash hazard is present.

Labeling & Storage

Keep container tightly closed in a cool, dry, and well-ventilated place. Store away from direct sunlight since light encourages polymerization. Isolate from incompatible materials such as strong oxidizers, strong acids and bases. Store away from heat sources and in a flame proof area. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Apply labeling as necessary to identify flammability, toxicity, and cancer hazards on the bottles, secondary containers, and external location.

Engineering Controls, Equipment & Materials

Fume Hood

Use fume hood to keep exposure to acrylonitrile as low as possible. If your protocol does not permit the handling of acrylonitrile in a fume hood, contact EHS to determine whether additional respiratory protection is warranted.

Housekeeping

Spills

Notify others in the area of the spill, including your supervisor. Evacuate the location where the spill occurred. Call 911 from any campus phone (or 704-687-2200 from a cell phone). Report any exposure to EHS at 704-687-1111. Remain on-site (at a safe distance) to provide detailed information to first responders.

Decontamination

Wearing proper PPE, decontaminate equipment and bench tops using soap and water. Dispose of the used chemical and contaminated disposables as hazardous waste following the UNC Charlotte EHS guidelines.

Waste

Refer to the UNC Charlotte Chemical Hygiene Plan for details.

First Aid & Emergencies

Skin and Eye Contact

Remove contaminated clothing and accessories, flush affected area with water. If symptoms persist, get medical attention.

Inhalation

Move person into fresh air. If symptoms persist, get medical attention.

Ingestion

Rinse mouth with water. If symptoms persist, get medical attention.

Name	Signature	Date