Standard Operating Procedure Peracetic Acid

Principal Investigator:	Date Approved:
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This document covers basic chemical safety information for peracetic acid. The use of peracetic acid 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 Peracetic Acid. DO NOT USE PERACETIC ACID UNTIL YOU HAVE OBTAINED THE NECESSARY PRE-APPROVAL.

Peracetic Acid

Peracetic acid (CH₃CO₃H) is an organic peroxide sold as a 38-40% solution with hydrogen peroxide in acetic acid. Solutions are colorless liquids. It is a strong oxidizer that is corrosive, flammable, toxic by ingestion, and highly toxic by inhalation. Heating peracetic acid solutions may cause a fire or explosion. Inhalation of peracetic acid vapors is particularly dangerous, and can be fatal. This substance also causes severe skin and eye damage.



Personal Protective Equipment & Personnel Monitoring		
Lab Coat	Gloves	Eye Protection
Flame resistant lab coat and a chemical-resistant lab apron over top	Nitrile or neoprene 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. If heating, use a blast shield for extra protection.

Labeling & Storage

Keep container tightly closed in a dry, well-ventilated place away from light. Open containers must be carefully resealed and kept upright to prevent leakage. Primary containers should be labeled according to the UNC Charlotte Chemical Hygiene Plan. The secondary container's label must contain the chemical name and corresponding hazards. Recommended storage temperature is 2-8 °C. Keep away from incompatible materials such as: strong reducing agents, strong bases, soluble carbonates/phosphates, amines, alcohols, and heavy metal salts. Store away from other flammables, combustible materials, and heat sources.

Engineering Controls, Equipment & Materials

Fume Hood

Handle using a chemical fume hood with good ventilation and electrically grounded lines and equipment. Vapors may form explosive mixtures with air. If your protocol does not permit the handing of such materials in a fume hood, contact EHS to determine whether alternative



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engineering controls or additional respiratory protection is warranted. Avoid mechanical friction or shock.

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

Clean contaminated surfaces with water. Avoid using organic materials in clean-up.

Waste

Refer to the UNC Charlotte Chemical Hygiene Plan for details.

First Aid & Emergencies

Skin Contact

Immediately remove contaminated clothing and shoes; flush skin with water for at least 15 minutes. Get medical attention immediately.

Eye Contact

Check for and remove contact lenses. Immediately flush eyes with water for at least 15 minutes. Get medical attention immediately.

Inhalation

Move person into fresh air. Get medical attention immediately.

Ingestion

Do not induce vomiting or give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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Name	Signature	Date