

**Chemistry Department
Standard Operating Procedure
Title: Perchloric Acid Use**

Date:	February 3, 2004	
Principal Investigator:		
Room & Building:	Fulmer Hall	
Phone Number:		

Section 1: (Check One)

Process

Process	x
Hazardous chemical	x
Hazard class	Oxidizer

Describe Process, Hazardous Chemical or Hazard Class.

Using perchloric acid for digestion.

Chemical: Perchloric acid.

Potential Hazards.

Perchloric acid fumes may migrate into fume hood ducting and react explosively with organic material in ducting.

Personal Protective Equipment.

Wear appropriate eye, hand and clothing to protect from spills, and splashes.

Developed on
2/3/2004

Developed by
Gary Johnson
July, 2002

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Engineering Controls.

There is one Perchloric acid hood in Fulmer 219. This is the only hood which may be used for Perchloric acid digestion, or heating Perchloric acid solutions.

Special Handling and Storage Requirements.

Any solution containing 70% Perchloric acid or higher must be used in this hood.

Spill and Accident Procedures.

Use the minimum amount of perchloric acid.

Decontamination Procedures.

The perchloric acid hood is equipped with wash down sprayers inside the ducting. Every use of the hood must be documented in the logbook. The log book should record who used the hood, what amount of perchloric acid was used, and that the hood ducting was washed down following the procedure outlined at the hood.

Waste Disposal Procedures.

Perchloric acid waste must be bottled, labeled correctly (percent composition of each component) and brought to Fulmer 23 for disposal.

Material Safety Data Sheet Locations.

Fulmer 23 and 318

Laboratory specific (SOP)

Outlined above.

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Protocol(s): (Each principle investigator should fill in this area with the specific procedure used)

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