

**VA MARYLAND HEALTH CARE SYSTEM
BALTIMORE, MARYLAND
RESEARCH AND DEVELOPMENT SERVICE
PROCESS MODULE**

PERCHLORIC ACID

1. **PURPOSE:** To identify and establish uniform policies, procedures, and responsibilities for safe handling, storage, and disposal of perchloric acid.

2. **POLICY:** Perchloric acid will be used as required by a principal investigator's protocol approved by SRS.

3. **GENERAL PROCEDURES:**

a. Purchasing: Perchloric acid will be purchased at 20% concentration or less.

b. Storage: Perchloric acid will be stored in a glass or ceramic dish large enough to hold the contents of the bottle. Perchloric acid should be stored in an acid cabinet away from organic materials. Protection against temperature extremes should be given.

c. Use and Disposal: Perchloric acid will be prepared for experimental use in a chemical fume hood with no other chemicals present. Recommended personal protective equipment (i.e. gloves, lab coat, safety glasses) will be used. Perchloric acid will not be heated above ambient temperature or allowed to evaporate. In the event of a spill, the entire hood will be washed down with copious amounts of water. The use of organic chemicals in hoods employed for perchloric acid digestions will be avoided. Solutions of perchloric acid diluted for use in the above procedures will be flushed down the drain with copious amounts of water. The original shipping container must be flushed with water prior to disposal.

d. New Protocols: Prior to an Investigator initiating a protocol using perchloric acid the following information must be submitted in writing to the SRS.

1. Description of protocol which includes methods, concentration, and total amount to be used.
2. Location of use and storage.
3. Method of disposal.

The investigator must comply with all statements in this policy.

4. **REFERENCES:** CRC Handbook of Electrophoresis, Vol. 111, pages 29-47, 1983.
5. **RESCISSION:** None.