## University of Washington Department of Chemistry

## STANDARD OPERATING PROCEDURES FOR HAZARDOUS CHEMICALS

## **ACIDS**

1. PROCESS	Handling, dispensing and diluting acids, including: Acetic Acid, Hydrochloric Acid, Nitric Acid, Phosphoric Acid and Sulfuric Acid. Other acids used in this lab are:  *
2. HAZARDOUS CHEMICALS/CLASS OF HAZARDOUS CHEMICALS	Acids cause burns to skin and eyes upon contact and to mucous membranes if fumes are inhaled.
3. PERSONAL PROTECTIVE EQUIPMENT	Wear chemical splash goggles and heavy duty neoprene gloves (consult Appendix F for proper glove selection). Lab coat or apron is recommended for personal protection and is required when dispensing quantities greater than 1 liter or when cleaning up a spill of a quantity greater than 1 liter.
4. ENGINEERING\VENTILATION CONTROLS	Concentrated acids should be dispensed in a fume hood.
5. SPECIAL HANDLING PROCEDURES AND STORAGE REQUIREMENTS	When diluting concentrated acids, small amounts should be added gradually to water and mixed thoroughly to dissipate any heat generated. Inorganic and organic acids should be stored in separate bins in the acid storage cabinet. Acids must be stored separately from bases, oxidizers and flammable solvents. Acids in glass bottles over 1L should be transported in spill proof carriers.
6. SPILL AND ACCIDENT PROCEDURES	In case of skin contact, flush affected area with copious amounts of water for 15 minutes. Obtain Medical Attention. Neutralize any spilled acids with sodium bicarbonate.
7. WASTE DISPOSAL	Small quantities, 25mls or less, of acids may be diluted 10 to 1 and discharged with excess of water. Large quantities of concentrated acids or acid mixtures should be labeled with a "Hazardous Waste Label" and contact EH&S (5-2848) for collection.
8. SPECIAL PRECAUTIONS FOR ANIMAL USE	*

<sup>\*</sup> To be filled in by PI or Laboratory Supervisor if necessary

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