

PI Name: Artyom Kopp

Standard Operating Procedures for Work with Acids

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| #1 | <p><u>Scope of Work/Activity:</u> Mixing various concentrations of aqueous acid solutions.</p> |
| #2 | <p><u>Specific Safety and Environmental Hazards:</u> Acids: lactic, hydrochloric, acetic, phosphoric. Avoid skin contact, serious burns may result.</p> <p>All tasks having potential for exposure are to be performed by trained staff and must have read the Material Safety Data Sheet.</p> |
| #3 | <p><u>Engineering Controls:</u> Use concentrated acids in fume hood. A safety shower and eyewash are available and accessible in the hallway.</p> |
| #4 | <p><u>Designated Area:</u> Conduct all work in Room __3337__</p> |
| #5 | <p><u>Personal Protective Equipment (PPE):</u></p> <p>Safety goggles and nitrile gloves can provide effective skin protection. Wear safety glasses or chemical splash goggles with face shield (face shield is available in Room 6310) when using large quantities, or chemical safety goggles when using small quantities. Wear rubber, neoprene, or PVC apron when using large quantities and splash potential exists.</p> <p>Before you begin working with any acid, know the location and proper use of the nearest spill kit, safety shower and eyewash station.</p> |
| #6 | <p><u>Emergency Procedures:</u></p> <p>Skin exposure: Rinse affected skin with plenty of water while removing contaminated clothing and shoes. Rinse for at least 15 minutes. Seek medical attention.</p> <p>Eye exposure: Splashes may cause tissue destruction. Wash eyes for at least 15 minutes, lifting the upper and lower eyelids. Seek medical attention immediately.</p> <p>Inhalation: Remove exposed individual to fresh air. If not breathing or if breathing is difficult, seek medical attention immediately.</p> <p>Ingestion: Do not induce vomiting unless directed to do so by medical personnel. Seek medical attention immediately.</p> <p>-Complete online incident report form at http://safetyservices.ucdavis.edu/reports</p> <p>Contact 911 for severe chemical exposures.</p> |
| #7 | <p><u>Waste disposal and unused stock disposal</u></p> <ul style="list-style-type: none">Surplus chemicals will be disposed of as hazardous chemical waste. |

#8

Decontamination and spill clean-up procedures

Employees in the area should be prepared to clean up minor spills confined to the chemical fume hood.

Small spills:

Do not attempt cleanup if you feel unsure of your ability to do so or if you perceive the risk to be greater than normal laboratory operations. Cover spill with broad spectrum absorbent. When absorbent is removed, wash contaminated area with bicarbonate solution.

Large spills:

Notify others in area of spill. Turn off ignition sources in area. Evacuate area and post entrance ways to spill area. Contact EHS or after hours (9-1-1) for spill response. Restrict persons from area of spill or leak until cleanup is complete.
