



ECKERD COLLEGE

Safe Operating Procedure

(12/03)

ULTRASONICATOR SAFETY

Ultrasonication uses sound waves to agitate mixtures. This process can cause rapid heating, localized points of high temperatures and pressures, and sound waves that could exceed NIOSH hearing protection levels. Follow these safety tips for preventing accidents and for hearing comfort when using ultrasonicators.

- Never use ultrasonication for sealed flasks or with flammable liquids, especially low-boiling solvents, such as ether.
- Ultrasonic equipment in the lab can be enclosed in a box lined with acoustically absorbing materials to reduce (mostly inaudible) emissions. Noise reducing boxes can be purchased from various vendors. Many come with clear acrylic doors that permit safe viewing of samples during processing. If your ultrasonic equipment cannot be enclosed, workers should wear earmuffs or other hearing protection for their comfort.
- Do not use sonicators with infectious agents.