USE OF REFRIGERATORS & FREEZERS

Storing flammable or unstable chemicals in domestic refrigerators/ freezers creates a hazard. "Lab-Safe" or flammable storage refrigerators/ freezers must be used for the storage of flammable/ explosive materials\(^1\). The interior of a lab-safe unit has no switches that could arc, or other spark points to provide a source of ignition. In most cases, a "Lab-Safe" refrigerator rather than an "Explosion-Proof" refrigerator is sufficient for storage of flammable materials. "Explosion-Proof" refrigerators are more costly but are designed to operate in areas where the air may be explosive. Those who have refrigerators/ freezers in their labs should follow the guidelines below.

Guidelines

- Only "Lab-Safe" or flammable storage refrigerators/ freezers should be used for storage of flammable or explosive materials (ethanol/water solutions containing more than 50% ethanol are considered flammable)
- Household refrigerators/ freezers are allowed in labs only for exclusive storage of aqueous solutions, or other nonflammable/ non-explosive materials, but fire codes require that all refrigerators/ freezers with flammable materials to be lab-safe
- EH&S recommends that a "Caution - Do Not Store Flammable Liquids in this Unit" label be placed on all household-type refrigerators/ freezers (sample above)
- Refrigerators/ freezers must be cleaned on a regular basis, and old chemicals must be properly discarded via EH&S (for information on hazardous waste disposal at UCR, visit the EH&S Waste Management webpage at [www.ehs.ucr.edu/programs/p2.aspx?id=54](http://www.ehs.ucr.edu/programs/p2.aspx?id=54))
- Never store food or drinks in any refrigerator/ freezer used for chemicals
- Refrigerators or freezers to be discarded must first be cleaned/decontaminated, inspected by EH&S, and cleared for collection by Materiel Management
- The chlorofluorocarbons (CFCs), such as freon, used by refrigerators/ freezers as a refrigerant must be removed by a certified technician before discarding old equipment - call Steam Plant at 827-4677 for assistance

Visit [www.ehs.ucr.edu](http://www.ehs.ucr.edu) for additional information or call EH&S at 827-5528 if you have any questions.

\(^1\) (National Fire Protection Association Code 45-22-12.2.2)