



WELCOME TO OUR

Quarterly Safety Newsletter

we're so glad you're here!



HI, DID YOU KNOW?

PFC Collection Event

Explosions involving peroxide-forming chemicals (PFCs) have occurred in other universities. To avoid similar incidents, USC EH&S Hazardous Waste team is collecting old, expired PFCs that have formed or may have formed peroxide crystals for a mid-December disposal event (USC main campus only).

- Check your inventory in Campus Optics and filter for PFCs or contact EH&S for assistance.
- Common examples are ethers, THF, dioxanes and anhydrous isopropanol.
- Assess the status of the chemicals. If showing peroxides or containers are old and past their recommended shelf life, contact EH&S. If purchased and opened within the last 10 months, mark the container with date received and date opened.

Hazard and Risk Alert

Anhydrous (99-100%) isopropanol, if opened and poorly stored (warm, light-exposed, frequent opening) can reach 100-1000 ppm (danger zone) peroxides in 6-18 months.

- Store in cool dark place.
- Avoid contamination with metals (Cu, Fe, etc.).
- Purchase quantities that will be used up within a year.
- Purchase 91% if possible (water content slows down peroxide formation significantly).

Good news: 70% isopropanol does not form peroxides.



A few Reminders

Going on extended vacation?- Ensure your laboratory is properly shut down.

Do you have a lab shutdown checklist?

- Hazardous materials secured?
- Critical equipment on emergency power?
- Non-critical equipment turned off?
- Emergency contact on hazard notice up-to-date?



Got peroxide forming chemicals? - Manage them responsibly to prevent waste and safety risks.

- Label containers with date received, date opened, discard date, and peroxide test log (if keeping beyond discard date).
- Post PFC inventory on storage cabinets, refrigerators, gloveboxes, dessicators, etc.
- Verify your PFCs on Campus Optics every 3 months.



Sign up!

SPRING SEMESTER TRAINING

Mark your calendars! Do not miss any safety training required to work in our laboratories. New dates are available for Chemical Lab Safety, Hazardous Waste, X-ray Safety, Laser Safety, BSL-2 and others!

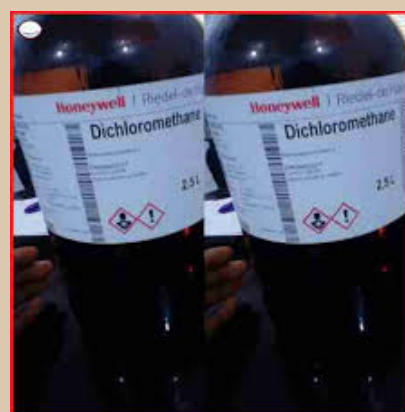
[TRAINING SCHEDULE](#)

Regulatory Update

EPA TSCA DCM RULE

The EPA Toxic Substances Control Act Dichloromethane Rule requires that labs using this substance prepare a written exposure control plan (ECP). Current SOPs should explicitly state the alternative substances that were evaluated and that no suitable substitute was found.

[PREPARE YOUR SOP!](#)





RADIATION SAFETY CORNER

Big Update: X-Ray & Laser Safety Trainings Are Now Instructor-Led!

Great news for everyone working with X-ray systems or Class 3B/4 lasers — these critical safety trainings have switched to live, instructor-led sessions held at Benson School.

Who needs to attend?

- X-Ray Safety Training: If you use X-ray systems.
Electron microscope users are exempt.
- Laser Safety Training: If you use Class 3B or Class 4 lasers.
Microscope users are exempt.

[Sign up now!](#)



BIOSAFETY CORNER



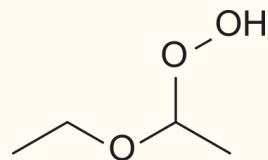
Handling needles?

- Carefully uncap needles to prevent recoil that can cause accidental needle stick.
- Do not bend, shear, break, recap or remove needles from disposable syringes before disposal.
- If absolutely necessary to remove needles, use needle remover in a sharps container.
- If absolutely necessary to recap needles, use forceps to hold the cap.
- Place disposable needles and syringes in a puncture resistant sharps container immediately after use.

Got needlestick?

- Wash exposed area with soap and water for 10 min.
- Report incident immediately to your supervisor.
- Supervisor an employee should call CompEndium 877-709- 2667 if medical treatment is necessary (blood-borne pathogens or other infectious agents).

News and Articles



ACCIDENTS WITH PEROXIDE-FORMING CHEMICALS

[Peroxide explosion in a rotavap.](#)

[Peroxide explosion during solvent extraction.](#)

[Explosion of "empty" bottle while processing hazardous waste.](#)

[Peroxide detonation while scraping evaporator glass joint.](#)

Arrivals

Welcome our newest Research Safety team member!



Name: Dexter Reasons

Position: Research Safety Coordinator (EH&S)

Start Date: 09/22/2025

Dexter graduated from USC in August receiving a Master's degree in Chemistry and Biochemistry. While studying at USC, she was employed as a graduate research assistant. Dexter lives in Columbia.

Contact us today

HAVE ANY QUESTIONS ABOUT CHEMICAL AND LAB SAFETY?

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[LET'S CHAT!](#)