

WELCOME TO OUR

Quarterly Safety Newsletter

we're so glad you're here!

**HI, DID YOU KNOW?**

Regulatory Update

The EPA Methylene Chloride Regulation under Section 6(a) of the Toxic Substances Control Act published in 40 CFR Part 751 Subpart B went into effect on July 8, 2024. This regulation applies to the use of methylene chloride (DCM) in research laboratories. Limit your workplace DCM vapor concentration below the action level (2 ppm average over an 8-hr workday) by using DCM inside in a fume hood and by proper storage and disposal of DCM waste. If you store and use DCM in your laboratory, you must have a written Standard Operating Procedure for its safe use. Report to EH&S any large volume storage or usage outside of a fume hood.

[FIND OUT MORE](#)

Hazard and Risk Alert

PEROXIDE FORMERS ARE DANGEROUS!

Do you have 1,4-dioxane, diethyl ether, tetrahydrofuran, sodium amide, or vinyl pyridine? These are just a few examples of compounds that form peroxides when exposed to oxygen (air). When peroxides are formed in containers of peroxide-formers, they become explosives that are sensitive to shock, heat, and ignition sources. As such, they become hazardous wastes that are even more costly to dispose of. Purchase peroxide formers with added inhibitors in the smallest reasonable amount so that the substance is used up before peroxides form. Mark the containers with date received, date opened, and discard date. Discard chemicals in their original containers according to defined schedule based on their peroxide former class.

[DISCARD SCHEDULE](#)

Latest Program Updates



YOU CAN FIND DETAILS ON OUR WEBSITE!

- [Managing your Laboratory](#) - new online training for Principal Investigators and Group Safety Officers
- [Compressed Gas Safety](#) - online training for personnel handling compressed gases
- [Personal Protective Equipment](#) - online training for all lab personnel
- [Campus Optics](#) - new inventory system. Email [Adam Roberge](#) with name and email of personnel who manage your chemical inventory. If your inventory has not been uploaded, send us the Excel file formatted according to the template available [here](#).
- [Hazardous waste pick-up requests](#) are now managed through Campus Optics.
- [Lab-specific LSM and Chemical Hygiene Plan](#) template was recently updated.

SEE FULL CASE STUDY



Coming 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, BSL-2 and others!

[TRAINING SCHEDULE](#)



Coming Up

HOLIDAY CLOSURE

Holiday season is here! Before leaving for extended time, make sure your laboratory is properly shut down and secured.

Enjoy your holidays!

[PREPARE YOUR LAB!](#)



RADIATION SAFETY CORNER

Planning to purchase an x-ray machine or recently purchased one?

Before purchasing an x-ray machine, contact Radiation Safety at radsafe@mailbox.sc.edu or (803) 404-1446 to begin the process. Vendors selling, installing, or servicing an x-ray machine in the state of South Carolina are required to be registered with the South Carolina Department of Environmental Services (SCDES).

All x-ray machines must be registered with SCDES by Radiation Safety within 30 days of installation. Contact Radiation Safety if you have recently purchased one. Some x-ray machine types that need to be registered with SCDES are:

- X-ray diffraction (XRD)
- X-ray fluorescence (XRF)
- X-Ray Photoelectron Spectrograph (XPS)
- Electron microscopes

SEE FULL CASE STUDY



BIOSAFETY CORNER

Shipping non-regulated bio materials on dry ice?

Shipping training is mandatory for all shipments of regulated dangerous goods, including dry ice. Certain biological material such as RNA from non-pathogenic microorganisms may be classified as non-regulated. However, any shipment involving dry ice requires prior completion of shipping training. Dry ice is categorized as a Class 9 Miscellaneous Dangerous Good and is regulated by both the U.S. Department of Transportation (DOT) and the International Air Transport Association (IATA) for air transport.

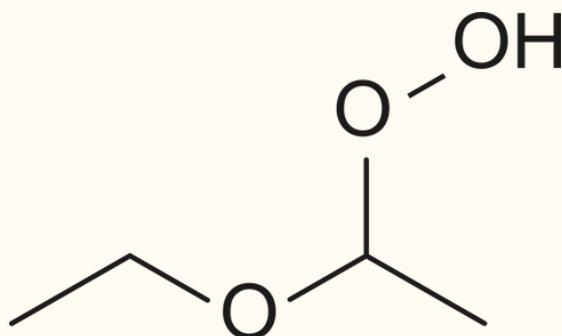
Questions? Contact Sherika Smith at smiths69@mailbox.sc.edu.

Shipping bio materials internationally?

Contact the [USC Office of Research Compliance](#) before shipping biological materials to outside the U.S. Non-compliance with export regulations may result in [serious consequences](#) including loss of research funding, fines, and potential imprisonment. Export control regulations also apply to genetic elements and genetically modified organisms that contain DNA associated with the pathogenicity of pathogens on the [Commerce Control List](#) (e.g., VSV-g packaging plasmids). Pathogen-related export controls apply:

- to more pathogens than what are on the HHS/USDA Select Agents & Toxins list
- to shipments to all countries, including “friendly” countries, and for all purposes, including purely academic collaborations
- in some cases, to materials that are attenuated or otherwise non-pathogenic
- even when the materials at issue are widely available and in use internationally.

News and Articles



ACCIDENTS WITH PEROXIDES

Peroxide explosion injured researcher.

Explosion of "empty" bottle while processing hazardous waste.

Hydrogen peroxide incident and accidents

Contact us today

HAVE ANY QUESTIONS ABOUT CHEMICAL AND LAB SAFETY?

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LET'S CHAT!