

BRINGING A SAFER WORKPLACE TO ALL MEMBERS OF THE CHEMISTRY BUILDING

New Dichloromethane Rules

On July 8th 2024, new EPA rules went into affect regarding the use of dichloromethane. For most uses, this chemical is effectively banned, however, one of the few exceptions is for use in laboratories. Although labs will still be allowed to use DCM, there are additional steps now required to limit exposure. The EPA has set the new action level at 1ppm for an 8 hour time weighted average (TWA) down from the MIOSHA action level of 12.5ppm. This means that when someone is exposed to more than 1ppm of dichloromethane over an 8 hour shift they will need additional procedures put in place to limit exposure as well as medical surveillance. The new EPA maximum exposure over an eight hour shift is 2 ppm down from the 25 ppm MIOSHA limit.

In February 2025, EHS started the required initial exposure monitoring on all tasks using dichloromethane all over campus. This involves doing normal tasks while



wearing a small badge which is then tested to determine your exposure level. For most tasks, this will only need to be done every 5 years but it will happen more often if there is a higher exposure or if there are changes to a procedure or when new procedures involving dichloromethane are created.

Lessons Learned

Needlesticks

One of the most common incidents we have in our labs involves needlesticks. The majority of these incidents were caused by either uncapping clean needles or attempting to recap used needles. The safest way to uncap a needle to open it is pulling the cap off farther away than necessary and keeping the hand with the cap away from your other hand, at least chest width.

As a rule, we should never recap needles. In cases they need to be reused, the needles should be put into a cork ring or something similar to prevent anyone from being pricked.

Here is an article from ACS on best practices for handling cannulas and needles in lab. Link







In addition to needlesticks we have another common incident involving needles and syringes. We have had multiple issues through the years of over pressurization of syringes when pushing liquid through a clogged needle. This issue can be mostly mitigated through the use of Luer-Lock syringes that have a more secure connection than other push connections. However, its also a good idea to take notice of resistance when pressing the plunger on a syringe and to stop if you notice that no liquid appears to be going though or you feel a greater resistance.

Lessons Learned

Small Fires

In February 2025 we had two separate fires. Luckily, in both cases the fires were small and went out by themselves extremely quickly.

The first of these incidents was caused when a student turned on a hotplate in a research lab and once it started to heat up a small fire started. Another person in the lab put a beaker over the fire and it went out. This fire was likely caused by an agar spill on the hotplate.

This is a good example of why you should always keep your work area clean, organized and clean up any spills you may have immediately.

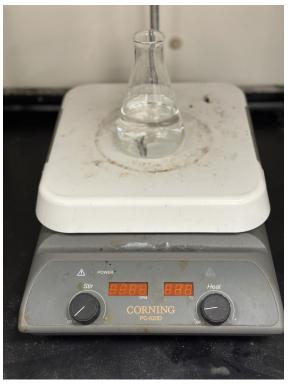
The second incident occurred when a student placed a quartz tube from a tube furnace after being heated to 1100 degrees
Celsius onto the labrock counter of the hood. The extreme heat caused the labrock surface to burn and for a few seconds there were flames where the tube was touching. These flames went out quickly by themselves but it left a burn mark on the surface.

Labrock counters are only rated for temperatures up to 205 degrees Celcius and can melt or burn at temperatures above that.

As a reminder, all fires, even minor ones that self extinguish need to be reported to DPSS immediately for state reporting. An officer or fire marshal may come out to take a look and get a statement but there is no punitive action for accidents. You can contact DPSS by calling 911 or their nonemergency number: (734) 763-1131.







Prescription Safety Glasses

Just a reminder that normal prescription glasses <u>DO NOT REPLACE SAFETY GLASSES</u>. If you have prescription glasses you must either have prescription safety glasses or large safety glasses that go over your normal glasses.

The University does have a prescription safety glasses program that provides vouchers for free or reduced cost prescription safety glasses.

- This program is available to all graduate students, postdocs, faculty, and staff.
- If you want to get a voucher please send an email to chrpeter@umich.edu with your name, UMID number, and position.



Campus recently had another EGLE (formerly DEQ)
Inspection looking at waste.
We were not part of the inspection this time but we are due for another one in the near future. We also have many other agencies (DEA, MiOSHA, EPA, etc) that may inspect our labs with little or no notice. Always keep your lab clean and safe.

SPRING-SUMMER TERM, 2026 Classes begin May 5, Tues Memorial Day (Holiday) May 25, Mon University Symposia. No Regular Classes. Classes end (Spring Half) 5:00 pm.....June 22, Mon Study Day.....June 23 Tues Examinations.....June 24-25, Wed-Thurs Spring Half Term ends......June 25, Thurs Summer Half Term classes beginJune 30, Tues Independence Day (Holiday) July 3, Fri Study Day.....Aug 18, Tues Examinations......Aug 19-20, Wed-Thurs Full Term and Summer Half Term end......Aug 20, Thurs

Dry Ice/LN2

Dry Ice

Dry ice is available everyday from the cooler outside of room A602 in the basement.

Liquid Nitrogen

Department dewars are accessible 24 hours a day outside of room A602 for small (under 10L) liquid nitrogen quantities.

Large dewars of liquid nitrogen can be ordered by emailing chrpeter@umich.edu AND chrisblu@umich.edu by noon one business day before its needed.



Contact Information

Package Shipping

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Phone-615-5034

Waste Issues

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Phone 764-7325

Safety Issues/Concerns

Christopher Peters—chrpeter@umich.edu

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Chemical Inventory Questions

Christopher Bluteau—chrisblu@umich.edu Phone—647-8932

Maintenance Requests

Routine Work Request Form on Chemistry Intranet

Baby Henry Wants You To Be Safe

