University of Illinois
F. Seitz Materials
Research Lab (MRL)

April 2018

**Important Dates and Reminders**

April:

DRS emergency shower and eyewash audit

- April 3rd and 4th

DRS lab safety audits for MRL are expected to begin the third week in April

- Calendar invites will be sent out to each group

Advanced Polymer Characterization Workshop

- April 4th 12-2pm; 2008 Supercon
- Lunch and Learn; register here

RBS Workshop

- April 19th 1:30-4pm
- If interested, contact Tim Spila for more info

June:

2018 Advanced Materials Characterization Workshop

- June 5th and 6th, 2018
- Information and registration, here

# Safety Newsletter

This month's topics are safety showers and eyewashes, laboratory housekeeping, and labeling chemicals/containers.

## Emergency Eyewashes and Showers

**When Required**:

Laboratories and other working areas that have potential for a worker to have their eyes exposed to a hazardous material are required to have a plumbed or self-contained emergency eyewash. These hazardous materials are ones that are classified as a corrosive, irritating to the eye, acutely toxic, or have health effects. Biosafety level 2 materials or greater require an eyewash in the lab.

Emergency showers must be provided in labs or other work areas were a person is exposed to chemicals that are corrosive to the skin, irritating to the skin, acutely toxic, of having health effects.

**Testing and Inspections**:

Emergency eyewashes must be activated **weekly**, long enough to be sure that the flow and flushing fluid is sufficient. Letting the water run for a minute allows it to clean out any rust, scale deposits, or bacteria that could be building up. Other items to inspect during this weekly test include:

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| Ensure that access to eyewash is unobstructed | Spouts are clean, and sink is free of excess items |
| Visually inspect eyewash for broken parts or potential leakage | Unit should be able to remain activated without the use of hands |
| Verify that protective covers are properly positioned, clean, intact | Keep an inspection log for weekly tests |
| Check that the flow is effective and continuous | If there are any problems during the tests, make sure they get resolved |

Emergency showers must be activated and inspected annually. DRS has a new program where they come and test and flush our showers here at MRL, Supercon, and ESB. This is not the safety contacts or any lab users' responsibility. However, lab users can do the following:

| | |
|---|---|
| Ensure that access to the shower/eyewash is unobstructed | Ensure that your shower has a F&S tag on it |
| Check that there are no broken parts or leakage | If there were problems with the shower during the annual test, confirm that they were taken care of |

When you start working in a new laboratory, it is important that during training you are shown where the nearest emergency eyewashes and showers are located and know how to use them.

You can reference the DRS webpage for more information on emergency eyewashes and showers.

## Useful Contacts

**MRL Safety Committee**
safety@mrl.illinois.edu

**MRL Safety Engineer**
Maisie Kingren
mlswans2@illinois.edu
217-244-8637

**Division of Research Safety**
drs@illinois.edu
217-333-2755
www.drs.illinois.edu

**Safety and Compliance**
fsserviceoffice@illinois.edu
217-333-0340
www.fs.illinois.edu/services/safety-and-compliance

## Laboratory Housekeeping

The risks of accidents and exposures to hazardous materials can be greatly reduced by having good housekeeping practices. You have a higher chance of an accident when your lab space is cluttered. Here are some housekeeping tips for you to follow:

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|---|---|
| Organize bench tops - large items in the back | Leave space to perform work safely and avoid reaching over items |
| Keep containers and glassware at least 2 inches away from edge of bench | Put away clean glassware that is not being used |
| Avoid accumulating dirty items/glassware on benches and by/in the sink | Discard disposable pipets and tips after use. Do not leave on the bench tops |
| Properly secure and label all containers | Keep drawers and cabinets closed when not in use |
| Clean up spills right away | Make sure eyewash stations, safety showers, and fire extinguishers are not blocked |
| Send out chemical waste regularly | Make sure walkways are clear and that there are no trip hazards |
| Lab coats are nicely hug up and in one spot | Used gloves go in trash |

Aisle and walkways in your labs are the pathways to safety in the event of a fire, chemical release, or other emergencies. Everyone should be able to make it through the lab to the exit door, even in poor conditions (poor visibility with smoke for example). Cluttered or blocked walkways can cause slips, trips, and falls and also violates the fire code. You must have walkways that are at least 28 inches wide at all points.

Keep chemical fume hoods clear of clutter. Cluttered fume hoods keep the hoods from functioning properly and does not provide protection from hazardous vapors that can be created.

## Labeling Chemicals

It is very difficult to hand and dispose of unknown chemicals that have unidentified hazards. Getting rid of unknown chemicals is very expensive and requires a screening process to identify the hazards.

The OSHA HazCom standard states that all labels on hazardous chemical containers must not be removed until the bottle is completely empty and rinsed. You should always date your chemical bottles with the date they were received and opened. This is particularly important for peroxide forming chemicals.

If your chemical is put into a secondary container, from original container to another one, it must be labeled with the following:

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|---|---|
| Full name of chemical – no abbreviations | Hazard identification such as flammable, toxic, corrosive, etc. |
| Date of transfer or preparation | Name of person who did the transfer or made the solution |
| List the solution or mixture, concentrations and solvents used | |

The labels must be legible and you should use a permanent marker that will not dissolve in water or the solvent used.

Beakers, flasks, or test tubes should be labeled with the name of the chemical. However if left over night, the users name must be on there as well. Even non-hazardous substances like water must be labeled.