



3116 Engineering Centers Building, 1550 Engineering Drive, Madison, WI, 53706

Chemical Transport into WCAM

Revisions

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1. PURPOSE AND SCOPE

- 1.1. This procedure describes the proper and safe way to bring chemicals into WCAM. The procedure will cover proper chemical transport on campus from building to building, transferring a solvent into WCAM, and transferring a corrosive chemical into WCAM.

2. DEFINITIONS

- 2.1. **Solvent:** A liquid substance capable of dissolving other chemicals. Usually is a flammable substance.
- 2.2. **Corrosive:** A substance having the tendency to cause corrosion. Usually an acid or a base in liquid form.
- 2.3. **Secondary Container:** A resilient container that will not break when dropped used to carry a chemical in its primary container or container that is different than the original manufacturer container. Usually a rubber bucket or something similar.
- 2.4. **Absorbent Pad:** A chemical pad that absorbs spilled chemicals. Certain absorbent pads are only compatible with certain kinds of chemicals.

3. Transporting a Chemical on Campus from Building to Building

- 3.1. WCAM is not responsible for lab users transport of chemicals outside of the WCAM lab and the Environment Health & Safety (EH&S) department should be consulted for questions about proper safety procedures outside of WCAM.
- 3.2. EH&S procedure for transporting chemicals on campus:
 - 3.2.1. If the chemical being transported is in its original manufacturer's bottle it should already have the proper chemical labeling by law. The bottle should be sealed shut.
 - 3.2.2. If the chemical being transported is in a different container than the original it must be in a container that is compatible with the chemical, usually the same material as the primary manufacturer's bottle. The container must also be labeled with the full chemical name, date, transport person's name, and the Safety Data Sheet (SDS) hazard symbols. The bottle should be sealed shut.
 - 3.2.3. Any special transport instructions in the chemicals SDS should always be followed.
 - 3.2.4. The properly labeled chemical in a sealed container shall be carried in a secondary container so if it is dropped it will help prevent the chemical bottle from breaking. A common secondary container is a rubber bucket with a handle.
 - 3.2.5. The person transporting the chemical should read its SDS beforehand so if there is a chemical spill or release they know the proper response. Also, there may be special transport instructions for some chemicals in their SDS. For example, "Do not shake".
 - 3.2.6. An absorbent pad compatible with the material being transported should be brought along in case of a spill. The absorbent pad should be big enough to cover the spill for the amount of chemical being transported.

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- 3.2.7. The person transporting the chemical shall walk when transporting the chemical. A personal vehicle, city bus, or bicycle is not acceptable for transporting a chemical on campus. Contact EH&S about transporting chemicals on campus via not walking.
- 3.2.8. The person transporting the chemical shall go directly from the chemicals original location to where it is going without unnecessary stops along the way.
- 3.2.9. No food or drink should be handled while transporting a chemical on campus.
- 3.2.10. The person transporting the chemical shall only transport what necessary. For example, if only 100ml. is needed do not transport 4L.
- 3.2.11. When arriving at the destination for the chemical if it is not going to be used right away it should be put in the proper storage cabinet.

4. General Rules for Bringing a Chemical into WCAM

- 4.1. A brand new chemical that is allowed for use in at least one tool in WCAM is allowed to be brought into the lab. If the chemical does not show up on WCAM's allowed list of materials anywhere the chemical cannot be brought into WCAM. Materials can be requested to be put on WCAM's allowed materials list by filling out the "Allowed Materials Request Form" and having it reviewed by lab staff.
- 4.2. A chemical that is not brand new and has been previously opened or was pre-mixed and made may not be brought into WCAM without prior approval by lab management. This chemical also has to be on WCAM's approved material list before talking to WCAM staff for an exception to this rule. WCAM keeps a list of exceptions for non-brand new chemicals being brought into the lab.
- 4.3. WCAM's chemicals and personal chemicals brought into the lab may never leave the lab, except by proper disposal in WCAM. Any exception to this rule must be brought to the attention of lab staff and removal of any chemical from WCAM must be supervised by WCAM staff.

5. Bringing a Solvent into WCAM

- 5.1. Solvent must be brand new and in its original unopened manufacturer bottle with correct safety labeling. Any solvent that is not new, previously opened, and/or has been pre-mixed by the lab user must be approved by lab management before bringing into the lab.
- 5.2. Any chemical that is not new and unopened that is brought into the lab must be labeled properly with the chemicals full name, dilution factor if applicable, lab users name, date, and the proper GHS SDS hazard symbols. WCAM supplies pre-printed labels in the gown room.
- 5.3. Bringing a Solvent into WCAM
 - 5.3.1. Enter the gown room
 - 5.3.2. Take the sealed solvent container out of its secondary containment and place in the red rubber bucket under the air shower for a secondary container to transport in WCAM.
 - 5.3.3. Follow gowning procedures.
 - 5.3.4. Grab the red bucket by its handle and transport the solvent bottle into the lab.



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- 5.3.5. Immediately take the red bucket to the metal solvent storage cabinet in the bay the solvent will be used and store it there. Or, if the solvent is to be used right away place it in the solvent wet bench it will be used in and store it properly after use.
- 5.3.6. Return red rubber bucket to underneath the gown room air shower.

6. Bringing a Corrosive into WCAM

- 6.1. Corrosive must be brand new and in its original unopened manufacturer bottle with correct safety labeling. Any solvent that is not new, previously opened, and/or has been pre-mixed by the lab user must be approved by lab management before bringing into the lab.
- 6.2. Any chemical that is not new and unopened that is brought into the lab must be labeled properly with the chemicals full name, dilution factor if applicable, lab users name, date, and the proper GHS SDS hazard symbols. WCAM supplies pre-printed labels in the gown room.
- 6.3. Bringing a Corrosive into WCAM
 - 6.3.1. Enter the gown room
 - 6.3.2. Take the sealed corrosive container out of its secondary containment and place in the red rubber bucket under the air shower for a secondary container to transport in WCAM.
 - 6.3.3. Follow gowning procedures.
 - 6.3.4. Enter the lab and go the bay where the corrosive chemical will be stored and don a face shield, rubber apron, and one chemical glove.
 - 6.3.5. Open doors with your nitrile glove or non-chemical glove hand. Go back into the gown room.
 - 6.3.6. Pick up the red rubber bucket by its handle using the hand with the chemical glove and transport the corrosive chemical to the plastic corrosives cabinet that it will be stored in. Make sure to only open doors using your hand with the nitrile glove. Or, if the corrosive is to be used right away place it in the corrosives wet bench it will be used in and store it properly after use.
 - 6.3.7. Open the corrosive storage cabinet door with your nitrile glove and use your hand with the chemical glove to take the corrosive chemical bottle out of the red bucket and place in the corrosives storage cabinet. Close cabinet door using nitrile gloved hand.
 - 6.3.8. Remove face shield, rubber apron, and chemical glove.
 - 6.3.9. Return red rubber bucket to underneath the gown room air shower.