4.0 Safe Handling Practices For Transporting Chemicals
TRANSPORTING CHEMICALS

Moving chemicals within the laboratory from one area to another can be very dangerous when safe handling precautions are not practiced. The following is a guide and standard operating procedure accepted by colleges and universities.

A. Perform a pre-move visual inspection and inventory of the chemicals that will be moved:

1. Make a list of the chemicals and note the type (e.g., acid, base, reactive, toxic), and amounts of the chemicals to be moved.
2. Make sure that each container is correctly labeled as to its contents, health and flammability.
3. Observe the general condition of each container.
4. Observe each container's cap or closure seal for the formation of crystals. Crystals can be a sign of decomposition. Ethers and other classes of organic peroxides can decompose and produce potentially dangerous and explosive crystals. 
   CAUTION, DO NOT TIGHTEN, OPEN OR MOVE CONTAINERS THAT HAVE CRYSTALS FORMING ON THE CAPS AND SEALS.
5. Chemical bottles should have secondary containment.

B. Locate and read the Materials Safety Data Sheets (MSDS) for each chemical to be moved:

Each MSDS has chemical specific handling and safety information that must be properly followed in order to move the chemical safely.

C. Plan the move:

1. Choose the best route to take the chemicals from point A to point B.
2. Use an elevator to transport chemicals to a different floor, avoid taking containers up and down stairs if possible.
3. Know the location of a phone and emergency numbers to call.

D. Prepare the chemical(s) for the move:

1. Remember to use the proper goggles, gloves and other personal protective equipment before handling any chemicals.
2. Transfer salvageable chemicals from deteriorating or contaminated containers to new containers with new labels. Properly dispose of unsalvageable and excess chemicals as hazardous waste.
3. Group the containers for the move by Hazard Class. Separate acids from toxics, or oxidizers from organic solvents. Make a separate move for each Hazard Class if good separation cannot be achieved on a single cart.
4. Make sure secondary containment is present for all chemicals.
5. If you use a cart to move containers make sure it has at least 3 sides with rails so the containers don’t slip off.
6. Place heavy containers on the bottom rack of the cart. Do not overload the cart; make several trips if necessary.
7. Take a chemical spill kit with you in the event you have a spill along the move. This can be a coffee can filled with vermiculite or an acid/base neutralizer.
E. During the move be prepared for unexpected events:

1. Stay with the containers. Do not let them out of your sight while you are moving them between points A and B.
2. Be aware of your surroundings. Watch for doors opening in your way. Warn people of the hazards before they get close to you.

By following these basic chemical handling practices during your move, you can ensure your safety as well as the safety of those around you.