WORKING SAFELY WITH TOXIC POWDERS

GENERAL TIPS

- Never handle toxic or irritating powders near someone’s desk or near a food preparation area.
- Handle these materials in a chemical fume hood, biological safety cabinet (BSC), or other exhaust hood whenever possible. This is required for particularly hazardous substances (PHSs) in powder form (unless there are extenuating circumstances). Search for PHSs online at www.safety.duke.edu. (Click PHS Search on the Services menu.)
- If you need to weigh out a toxic or irritating powder but you cannot locate the balance inside a fume hood or BSC, consider one of these alternatives:
  ⇒ Purchase the material in liquid form so that you avoid handling powder altogether, OR
  ⇒ Purchase in pre-weighed amounts, preferably in a sealed vial with a septum so that diluent can be injected directly into vial, OR
  ⇒ Obtain an exhausted balance enclosure, OR
  ⇒ Follow the steps below to safely weigh the material using a balance that is not in a hood or BSC.

SAFE WEIGHING OF POWDERS
WHEN THE BALANCE IS NOT IN THE HOOD

- Tare (pre-weigh) an empty container with a lid.
- Go to fume hood or BSC, add approximate amount of powder to container, and close lid.
- Return to the balance and determine mass of powder.
- Return to the fume hood or BSC to prepare solution.