

3.2: GETTING THE CHEMICALS TO YOUR REACTION FLASK- POURING, SYRINGES AND WEIGHING

Laboratory chemicals are typically stored, and dispensed, in a variety of containers and locations. Therefore, early hurdles in every experiment are 1) figuring out how to obtain the desired amount of the chemical, 2) figuring out how to transfer this material safely from the location where it is obtained to the location where it will be used, and 3) figuring out how to put the materials in the apparatus.

Solids: Solids are usually stored in wide-mouthed bottles and weighed before use. The solid is weighed using a weigh boat, or a piece of weighing paper, and it is usually possible to transfer the solid from the bottle to the boat (or paper) using a clean spatula or lab scoop. A good laboratory practice is to remove the weigh boat (or paper) from the balance each time you add solid to it, and then return the boat (or paper) to the scale. This practice reduces the likelihood that any chemicals will get spilled on the balance.

Liquids: Liquids are typically more difficult to handle, and the appropriate method will depend on how much liquid is needed and the specific properties of that compound. In most cases, it will be safer and more convenient to obtain a specific volume instead of weighing the liquid. For reagent quantities, a pump system is often employed to deliver calibrated volumes, or a graduated cylinder can be used. Solvents, whether needed for reactions or extractions, tend to be used in larger quantities and a graduated cylinder will nearly always be more convenient.

This page titled [3.2: GETTING THE CHEMICALS TO YOUR REACTION FLASK- POURING, SYRINGES AND WEIGHING](#) is shared under a [CC BY-NC 4.0](#) license and was authored, remixed, and/or curated by [Alexander Sandtorv \(PDX Open publishing initiative\)](#) via [source content](#) that was edited to the style and standards of the LibreTexts platform.