

Acetone spill



What happened?

A researcher removed a 4L bottle from the flammable cabinet from underneath the fume hood. The container was lifted by the finger hole as it was lifted out of the cabinet and then the head of the container broke away from the finger hole leaving the researcher the top portion with the finger hole in hand. The rest of the container came crashing down onto the floor in front of the fume hood. The bottle was not bumped into anything thus surprising the researcher as to how the bottle came apart. The image below marks the relative location where the bottle came apart.



The researcher acted quickly noting no ignition sources nearby and then opened the fume hood sash to increase air exhaust and evacuated the room and promptly contacted EHS.

The spill involved around 2L of acetone; most evaporated, and a small amount (~200mL) was collected and poured into our acetone waste container. Most pieces of the 4L glass jug were also collected and placed into the broken glass waste container.



Lessons learned from this incident include:

It is good practice to visually check integrity of containers and look for any flaws with the glassware. Also, when handling large sized containers, it is good practice to securely hold the container from the bottom and the finger hole. Alternatively, use a carrying tote (image below) for easy of transporting hazardous chemicals safely.



Additionally, keep a hazardous spill kit available to absorb and to contain the spill.