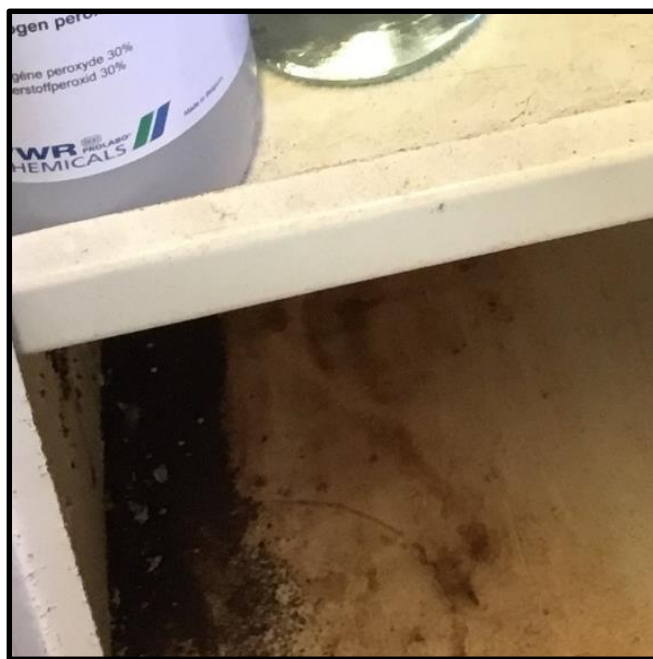


# Safety Alert

## Leak Caused by Inappropriate Storage

14 August 2019



### Description

A number of bottles of xylene had been incorrectly stored on their sides in a flammable solvent cabinet within a laboratory due to the cabinet having been overfilled. On opening the cabinet the bottles were found to be leaking causing contamination of both the cabinet and other bottles as well as producing potentially toxic, flammable vapours as the solvent evaporated. The leak appeared to be a constant, slow stream which is consistent with a leak from the seal associated with the cap of the bottle. These seals are not intended to fully seal the bottle if immersed so leaks are very common when solvent bottles are not properly stored.

### Actions Taken

- The leaking bottles were carefully removed from the cabinet by a technician, cleaned and placed upright in a fume cupboard to allow vapours to dissipate and any further leaks to be identified.
- The cabinet was emptied completely and the spilled solvent absorbed with an inert, spill absorbent. The waste was then collected and triple bagged for disposal via the University's chemical waste contractor.

### Learning Points

- Solvents and other liquids in bottles or jars should **never** be stored on their sides. They should always be stored fully upright and not stacked on top of other containers to help prevent leaks and accidents
- Where possible solvents should always be stored in appropriate bunded cabinets. In this case the spill was fully contained within the bund making the clean-up much easier. Remember that incompatible chemicals **must not** be stored together.
- Good stock management will help improve the storage space available and reduce the temptation to stack chemicals on top of each other. Only order what you need and consider sharing some common chemicals.