

School of Chemistry SOP for Malodorous Chemicals

Thiols and other foul-smelling compounds can be mistaken for gas. Thiols are added to natural gas as it is odourless and extremely dangerous; the thiols allow it to be detected easily. While some chemicals such as selenides, tellurides and some phosphines may not smell of gas, they can be so foul-smelling as to necessitate lab evacuation if improperly handled. For this reason, additional measures must be taken to ensure these compounds are not released.

In addition to the standard precautions to be taken before undertaking any experimentation (i.e. a well thought out experimental procedure developed, and a risk assessment completed), the following actions must be taken:

- Email the School Safety Coordinator; who will inform Campus Services of the potential for a mistaken gas leak and the exact location of the experimentation. Please include the following information:
 - Room number
 - Fume cupboard number
 - Name and amount of reagent being used
 - Reaction start/end/work-up times

Notifications must be sent the day before the reaction is started, by 17:00 at the latest.

- Undertake the experiment in a fume cupboard.
- Treat these compounds as though they are air sensitive; work with a sealed system.
- Vapours from the reaction should be bubbled through a bleach solution.
- Clean all glassware involved in the reaction in a bleach solution.
- Inform the School Safety Coordinator if any foul smells escape from the fume cupboard.
- Inform the School Safety Coordinator if any foul smells are noticed in lab spaces where such chemicals are not being used.

