

The S_N2 Reaction: Preparation of an Anti-Bacterial Compound

Safety Notes:

Safety first, always.

Generally, please try to keep your work area clean. This includes the hood. Wearing gloves wipe up your area before you begin with a damp sponge. Wipe up all spills as they occur.

This reaction involves heating a closed system. Generally, this is discouraged, however, when a reaction is very small scale and the volume is very small, the chances it will explode are very low. To enhance safety, we are using pressure releasing vials.

Please use these vials and do not waste them.

Also, do not stand with your face over the pie reactor. You should wear goggles (not safety glasses), aprons and gloves.

It is well known that safety glasses are blown off in an explosion. Goggles normally stay on.

In modern organic chemistry, many reactions are done in sealed, pressure releasing vials. However, with your normal glassware, you should never be heating a closed system.

4-methyl-umbelliferone and its alkylated products are toxic (all compounds are at some dose) and have biological activity. You should wear gloves, goggles (not safety glasses). If you get any of the starting materials on your skin, you should flush your skin for fifteen minutes with cold water.

Sodium hydroxide is corrosive and the same precautions should be taken for this material as the organic starting material. Goggles, gloves, and aprons. Flush any exposed area for fifteen minutes with cold water.

The haloalkanes are toxic and irritants. Wear goggles, gloves and aprons at all time. Fllush any exposed area for fifteen mintues with cold water.

These instructions apply to all materials used in the lab.