There are several ways to quench lithium aluminium hydride.

- **Dropwise** addition of a saturated aqueous sodium sulfate (Na\(_2\)SO\(_4\)).
- For each (one) gram of lithium aluminium hydride used, add **dropwise** one ml water followed by one ml of 15\% aqueous NaOH and, finally, 3 ml of water. Filter the resulting solid through a pad of celite. Rinse with solvent.
  - Alternatively, after the final water addition, the mixture can be diluted with diethyl ether and dried (anh. sodium sulfate, stir 15 minutes) to produce an easily filtered mixture, capable of being filtered through paper, if so desired. Evaporation of the filtrate gives the crude product. This method is especially useful for polar products with appreciable water solubility.
- Add 3 equivalents of sodium fluoride (NaF) followed by **dropwise** addition of a 9:1 THF:Water mixture.
  - Filter the resulting white solid through a pad of celite. Rinse with THF. This method will sometimes produce a finner solid that traps less of the desired product.
- **Dropwise** addition of an aqueous solution of Rochelle's salt (sodium potassium tartrate, KNaC\(_4\)H\(_4\)O\(_6\))
- Recrystallize sodium sulfate from water and grind this with an equal volume of celite using a mortar and pestle. This mixture may be stored indefinitely. To quench your LAH reduction, add the celite/hydrated sodium sulfate mixture to your reaction mixture one spatula full at a time. This will be exothermic and might cause the reaction to temporarily stop stirring, but keep adding the solid until the mixture resumes stirring. Once the solution has been quenched and freely stirs, filter through a fritted funnel, wash the solid with a small amount of THF or diethyl ether, and evaporate the solvent to obtain your product.

**Contributors**

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