NMR Spectroscopy: Preparing a Sample

Background Reading

Preparing a sample
For the neat liquid compounds pipet 5-6 drops into a clean NMR tube. Dilute the sample with perdeuterated solvent until the solution fills approximately 3 cm of the NMR tube. For the solid organic compound place 10-15 mg of solid in a clean 1 dram glass vial and dissolve in a minimum of perdeuterated solvent. Transfer the solution to a clean NMR tube by pipet and fill the tube to a height of 3 cm with solvent. Place the plastic cap over the end of the NMR to prevent evaporation.

Note: It is very important to avoid contamination of the chemicals and solvents used in this experiment. Never pipet directly from a stock reagent bottle!

Too little sample. Instrument will not lock.

Too much sample. Instrument will not lock.

Waaaaay too much sample. Instrument will not lock.

Perfect amount of sample.