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7.2. GC Sample Preparation Guide

Overview:

This handout describes how to prepare a standard gas chromatograph sample. It involves preparing a dilute solution of a somewhat volatile compound and using the GC to assess its purity.

Reference:

Zubrick page 252

Liquid Sample Preparation:

- 1) Insert the tip of a Pasteur pipet into the liquid. Capillary action will draw approximately 10 mg of the liquid into the pipet.
- 2) Rinse this into a vial using 1 mL of a volatile solvent – ether, ethyl acetate, pentane, etc.
- 3) Insert the tip of a pipet into this liquid.
- 4) Rinse this through a pipet filter into another vial using 1 mL of the same solvent.
- 5) Your sample is ready to be injected!

Solid Sample Preparation:

- 1) Dissolve approximately 10 mg of the compound in 1 mL of one of the volatile solvents listed above.
- 2) Perform steps 3–5 above