

LABORATORY NOTEBOOK (Pre-lab)

• OBJECTIVE

- Must clearly state:

- What will be investigated
- How it will be investigated
- How it will be proven

• CHEMICAL EQUATION

- Include the general chemical equation from top of [page 81](#).

• TABLE OF PHYSICAL DATA

- In a single organized table, include the MW, bp, density, and hazards for the following:

- LIQUIDS: sulfuric acid, 2-methylcyclohexanol, 1-methylcyclohexene, methylenecyclohexane, 3-methylcyclohexene, and methanol.

• REFERENCE TO PROCEDURE

- Include *complete reference* to lab manual, including:
 - full title
 - edition
 - authors
 - page numbers where actual procedure can be found

LABORATORY NOTEBOOK (In-lab)

○ DATA/CALCULATIONS

- Initial weight of 2-methylcyclohexanol used
- Distillation range
- Initial weight of 10 mL round bottom flask
- Final weight of 10 mL round bottom flask
- Final product weight
- physical state and color of product
- GC vial slot #
- theoretical yield calculation (not just the final value!)
- % yield calculation (not just the value)
- Give an example of an adjusted area % calculation

○ EXPERIMENTAL PROCEDURE

- In *paragraph form*, describe the procedure that you actually followed during the lab.
- Paragraph must be written in **PAST TENSE, PASSIVE VOICE**.
 - Include any volumes or weights of chemicals used during the experiment.
 - Include any mistakes, accidents, or observations if necessary.