

This document highlights some frequently missed points in the formal lab report for Unit 5. This note is not intended to be a replacement for the formal lab report guidelines/instructions that are posted on Blackboard. Students still need to follow the detailed instructions on Blackboard.

Table of reactants and products

The physical description of crude and purified sample should be mentioned in the table footnote (i.e., at the end of the table using reference marks (asterisks)).

Discussion:

Characterization of crude product was based on

1) Appearance:

Description of the actual physical appearance of your crude product
Literature description of product molecule (could be found in text books or websites)
Conclusive comparison between these two melting points

2) Melting point:

Melting point of your crude product (actual numerical values should be mentioned)
Literature m. p. of product molecule (actual numerical values should be mentioned)
Comparison between these two melting points

Characterization of purified product was based on

1) Appearance:

Description of the actual physical appearance of your purified product
Literature description of product molecule (could be found in text books or websites)
Comparison between these two

2) Melting point:

Melting point of your purified product (actual numerical values should be mentioned)
Literature m. p. of product molecule (actual numerical values should be mentioned)
Comparison between these two

In addition to the comparisons made to the literature values, comparisons between the crude and purified samples should be made. In this way, comments on the effectiveness of the purification process can be made.

Yield discussion:

Few reasons for any yield more than 100% should be described (e. g. residue solvent, impurities ...)

Few reasons for any yield less than 100% should be described (potential impurities in reagents, incomplete reaction, side reactions, dissolution of product during filtration, mechanical lose....)