

**USING REFERENCES for ORGANIC COMPOUNDS**

REF: *Aldrich Catalog Handbook of Fine Chemicals*, Aldrich Chemical Co., Inc., Milwaukee, WI  
*CRC Handbook of Chemistry and Physics*, CRC Press, Inc., Boca Raton, FL  
*Introduction to organic chemistry*, W. Brown & T. Poon, Wiley, Hoboken, NJ  
*Lange's Handbook of Chemistry*, McGraw-Hill  
*The Merck Index*, Merck & Co., Inc., Rahway, NJ  
*The Organic Chem Lab Survival Manual*, J. Zubrick, Wiley, Hoboken, NJ, chapter 3

EQUIPMENT: n/a

MATERIALS: n/a

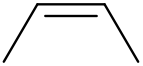
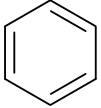
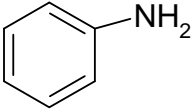
**INTRODUCTION**


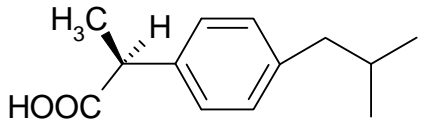
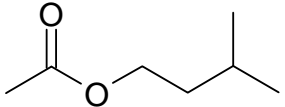
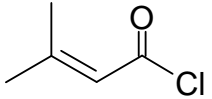
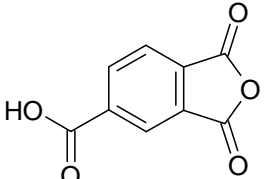
There are three or four common sources for information about organic compounds. These are the *Chemical Rubber Company Handbook of Chemistry and Physics* (commonly referred to as "The CRC"), the *Merck Index* ("The Merck"), the *Aldrich Catalog and Handbook of Fine Chemicals* ("Aldrich"), and *Lange's Handbook of Chemistry* ("Lange's"). Copies of each of these are in the laboratory. Your lab handbook (Zubrick, chapter 3) will help you to use and interpret these reference sources.

**PROCEDURE**

1. Briefly review chapter 3 in Zubrick's *Organic Chem Lab Survival Manual*.
2. Complete the tables of names, formulas, and properties for each compound.
3. Use each source for 4 different compounds; that is, use CRC for 4 compounds, the Merck for 4 compounds, and Aldrich for 4 compounds.

## NAMES &amp; FORMULAS

	SYSTEMATIC (IUPAC) NAME	SYNONYMS or COMMON NAMES	MOLECULAR FORMULA	LINE-ANGLE FORMULA
1			$C_3H_8$	
2	<i>cis</i> -2-butene			
3			$CHCl_3$	
4	ethanol			
5			$C_2H_6O$	
6				
7		aminobenzene		

	SYSTEMATIC (IUPAC) NAME	SYNONYMS or COMMON NAMES	MOLECULAR FORMULA	LINE-ANGLE FORMULA
8				
9		Advil		
10		isoamyl acetate		
11	3-methylbut-2-enoyl chloride			
12		trimellitic anhydride		

**PROPERTIES**

	REFERENCE SOURCE(S)	MOLAR MASS	MELTING & BOILING POINTS	DENSITY	REFRACTIVE INDEX	SOLUBILITY	TOXICITY?
1							
2							
3							
4							
5							
6							
7							

	REFERENCE SOURCE(S)	MOLAR MASS	MELTING & BOILING POINTS	DENSITY	REFRACTIVE INDEX	SOLUBILITY	TOXICITY?
8							
9							
10							
11							
12							