

Homework Week 12

Concepts, Chapter 9: Naming alcohols and thiols, acidity and acid/base reactions of alcohols/thiols, converting OH into a good leaving group, oxidation of alcohols, diols and thiols.

Reactions: Deprotonation of alcohols to make better nucleophile/strong base
Formation of alcohols and thiols via S_N1/S_N2 reactions or addition reactions
Conversion of alcohols to alkyl halides with HX, PBr_3 or $SOCl_2$
Formation of tosylates
Dehydration of alcohols with strong acid
Oxidation of alcohols to aldehydes, ketones, carboxylic acids
Oxidative cleavage of diols

Monday, May 6

Read through Section 9.6A (if you haven't done so already)
Problems 14.10, 20b,c (formula is C_6H_{10}), 21 (formula is C_4H_9Br), determine structure based on IR and 1H NMR--don't do a-c), 22a-d,f

Tuesday

Finish reading section 9.6
Problems Chapter 9.1-7, 14-16

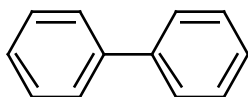
Wednesday

Read sections 9.7-9.8
Problems 9.8, 18-22
Quiz Problems Lab Text (Mohrig, et. al): p 604-609: 3, 5, 6 (see structures below--turn these in as part of the quiz on Friday.)

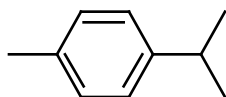
Friday, May 10

Finish reading Chapter 9
Problems: Chapter 9.26, 27, 29-32

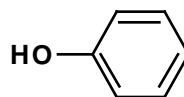
Structures for problem 3, p. 604 from Mohrig, et. al.



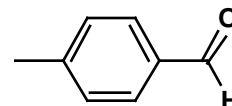
biphenyl



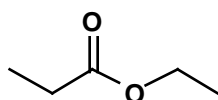
4-isopropylmethylbenzene



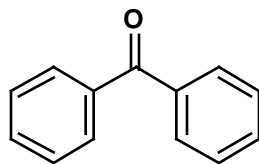
phenol



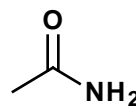
4-methylbenzaldehyde



ethyl propanoate



benzophenone



acetamide