

Flashcards

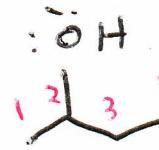
- 1) synthetic utility - what does it make?
- 2) reagents
- 3) conditions
- 4) mechanism
- 5) stereochemistry
- 6) regiochemistry

Alcohols



1-butanol

→ butan-1-ol



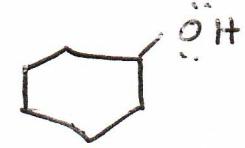
2-butanol



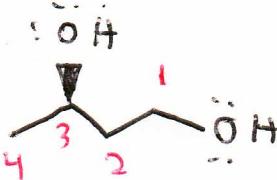
ethanol



Methanol

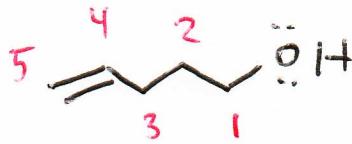


cyclohexanol



(R)-butane-1,3-diol

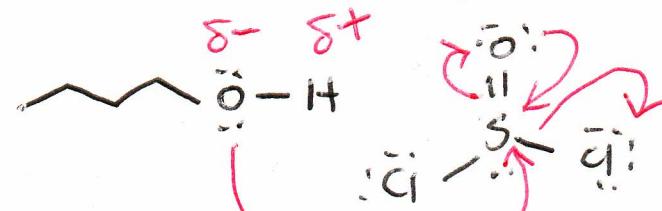
saturated due to following consonant



pent-4-en-1-ol

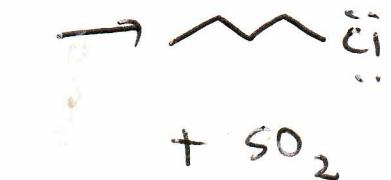


SOCl_2 - thionyl chloride



oxonium
(positive on O)

good
leaving
group



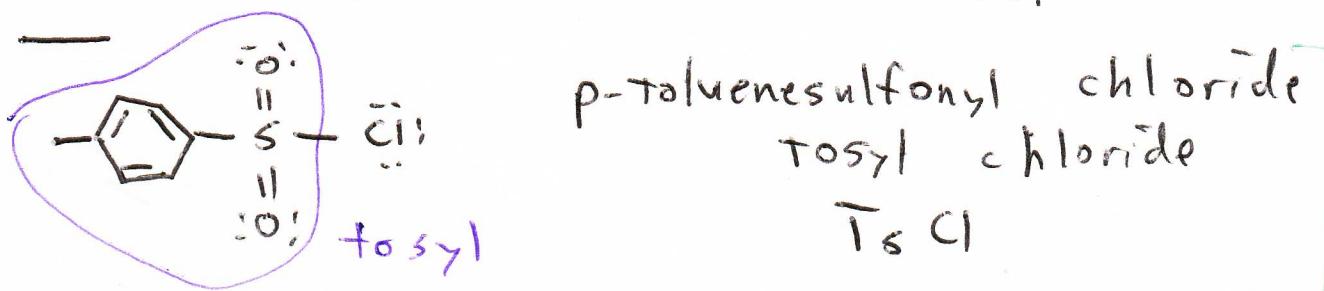
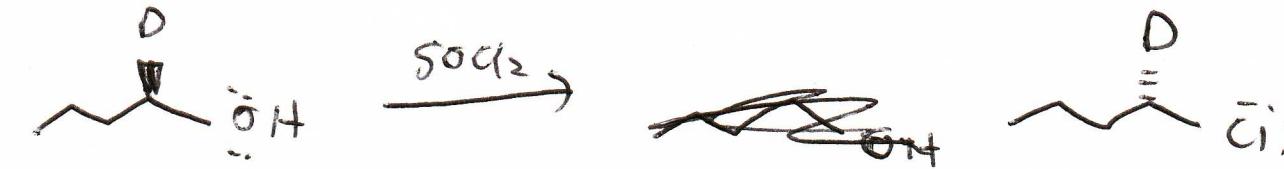
1) utility: alcohol \rightarrow alkyl chloride

2) reagents: SOCl_2

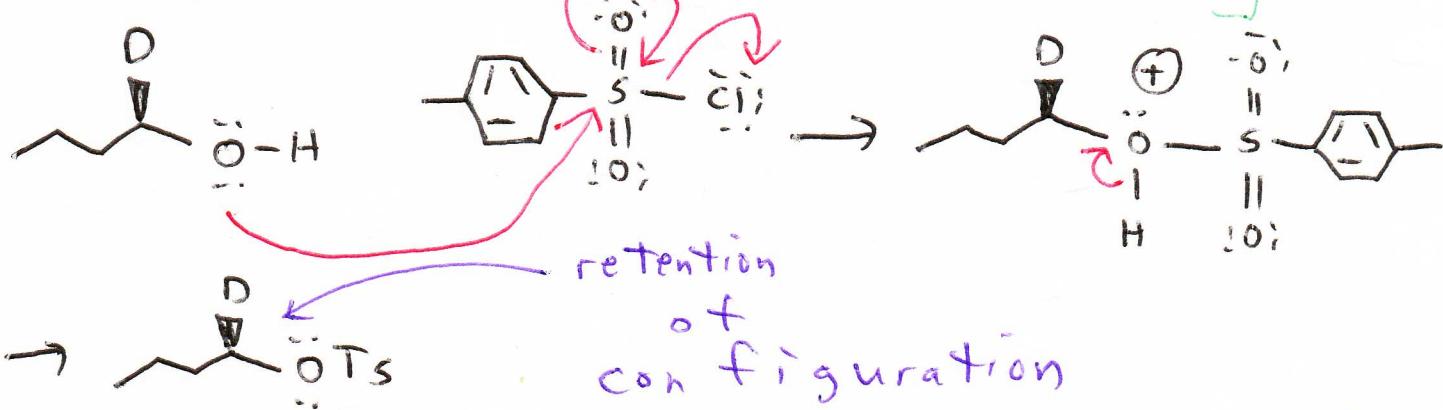
3) conditions: anhydrous

5) stereochemistry: inversion

6) regiochemistry: none (no change)



Sulfonyl chlorides



Due to the inclusion of a base to remove H^+ , Cl^- is effectively prevented from reacting.

