

E1 vs. E2

Note: reactivity increases in this order 1° 2° 3° but for different reason.

For E2 the reactivity increases because the most highly branched alkene is being formed.

For E1 the reactivity increases due to the formation of the most stable carbocation.

Here the role of the base is important.

In E2 the base takes part in the rate determining step, in E1 it does not-why?

Therefore, E2 depends on the nature of the base.

- We should expect:
1. Strong bases favors E2 and has no effect on E1.
 2. High concentration of the base favors E2.

For best results elimination should proceed by E2 and not E1-why?