



Topic 3 Summary Questions

1. You are running the SN2 substitution below – a dipolar aprotic solvent is found to give maximum rate and yield – what would be a good choice and why?



2. You have a reaction product in heptane – you can isolate by distilling the solvent off, or extracting into water and crystallising – which is the best option?
3. The first route to Sildenafil citrate (Viagra™) used 1,350 Kg of dichloromethane/methylene chloride per Kg of product. Discuss the merits or otherwise of using this solvent in large volume production.
4. Trifluorotoluene or 2-methyltetrahydrofuran have been suggested as replacements for methylene chloride. Discuss the relative merits of these solvents vs. methylene chloride.



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