

Summary of Reactions You Need to Know for HL Chemistry

Family	Combustion	Addition	Polymerization	Oxidation	Special Case
Alkanes	Complete & incomplete				1. CH ₄ with Cl ₂ or Br ₂ – Mechanism needed 2. Cracking
Alkenes	complete	With H ₂ , halogens, HX, & H ₂ O Last 2 – Markovnikov's Rule!	yes	KMnO ₄	Bromine water
Alkynes	complete	see alkenes – exception with H ₂ O			
Haloalkanes					S _N 1 and S _N 2 E ₁ and E ₂ mechanisms needed
Aromatics		halogenation, nitration, Friedel-Crafts alkylation, Friedel-Crafts acylation hydrogenation			o,p vs m directors
Alcohols	Complete			With mild and strong oxidizing agents	Alcohols