

Haloalkanes

Specification reference	Checklist questions	
4.2.2 a i	Can you describe hydrolysis of haloalkanes in a substitution reaction by aqueous alkali?	<input type="checkbox"/>
4.2.2 a ii	Can you describe hydrolysis of haloalkanes in a substitution reaction by water in the presence of AgNO_3 and ethanol to compare experimentally the rates of hydrolysis of different carbon–halogen bonds?	<input type="checkbox"/>
4.2.2 b	Can you define and use of the term <i>nucleophile</i> (an electron pair donor)?	<input type="checkbox"/>
4.2.2 c	Can you describe the mechanism of nucleophilic substitution in the hydrolysis of primary haloalkanes with aqueous alkali?	<input type="checkbox"/>
4.2.2 d	Can you explain the trend in the rates of hydrolysis of primary haloalkanes in terms of the bond enthalpies of carbon–halogen bonds (C–F, C–Cl, C–Br and C–I)?	<input type="checkbox"/>
4.2.2 e i	Can you explain the production of halogen radicals by the action of ultraviolet (UV) radiation on CFCs in the upper atmosphere and the resulting catalysed breakdown of the Earth's protective ozone layer, including equations to represent the production of halogen radicals?	<input type="checkbox"/>
4.2.2 e ii	Can you explain the production of halogen radicals by the action of ultraviolet (UV) radiation on CFCs in the upper atmosphere and the resulting catalysed breakdown of the Earth's protective ozone layer, including equations to represent the catalysed breakdown of ozone by $\text{Cl}\cdot$ and other radicals (e.g. $\cdot\text{NO}$)?	<input type="checkbox"/>