Edexcel iGCSE Chemistry Checklist

Section D19: **Alkanes, Alkenes and Alcohol**

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| ***I can***  | ☺ | 😐 | ☹ |
| recall that alkanes have the general formula CnH2n+2 |  |  |  |
| draw displayed formulae for alkanes with up to five carbon atoms in a molecule, and name the straight-chain isomers  |  |  |  |
| recall the products of the complete and incomplete combustion of alkanes |  |  |  |
| describe the substitution reaction of methane with bromine to form bromomethane in the presence of UV light. |  |  |  |
| recall that alkenes have the general formula CnH2n |  |  |  |
| draw displayed formulae for alkenes with up to four carbon atoms in a molecule, and name the straight-chain isomers (knowledge of cis- and transisomers is not required) |  |  |  |
| describe the addition reaction of alkenes with bromine, including the decolourising of bromine water as a test for alkenes. |  |  |  |
| **describe the manufacture of ethanol by passing ethene and steam over a phosphoric acid catalyst at a temperature of about 300°C and a pressure of about 60–70 atm** |  |  |  |
| **describe the manufacture of ethanol by the fermentation of sugars, for example glucose, at a temperature of about 30°C** |  |  |  |
| **evaluate the factors relevant to the choice of method used in the manufacture of ethanol, for example the relative availability of sugar cane and crude oil** |  |  |  |
| **describe the dehydration of ethanol to ethene, using aluminium oxide** |  |  |  |
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