

Green chemistry: Principles developed by chemists and the chemical industry to enact a more sustainable industry.

Commonly accepted principles of green chemistry:

- Prevention – Preventing waste is easier than cleaning it up.
- Atom economy – Maximise the incorporation of all materials used during the process into the final.
- Less hazardous chemical synthesis – Generating little or no toxic products or by-products.
- Safer solvents and auxiliaries – These should be made unnecessary wherever possible and innocuous.
- Design for energy efficiency – Energy requirements should be minimised.
- Use of renewable feedstocks

Ethanol:

Fermentation (greener method):

Hydrolysis of sucrose:	$C_{12}H_{22}O_{11(aq)} + H_2O_{(l)} \xrightarrow{\text{Invertase}} 2C_6H_{12}O_{6(aq)}$
Fermentation:	<i>Type equation here .</i>
Overall:	<i>Type equation here .</i>