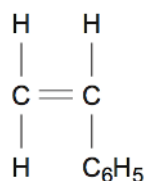


0	1
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The diagram shows the structural formula for styrene. Styrene is a monomer that can be made into a polymer.



0	1	.	1
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Give evidence from the diagram that shows styrene is unsaturated.

**it contains a carbon to carbon double bond**

[1 mark]

0	1	.	2
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Complete the diagram to show the product in the equation.

[2 marks]



Brackets correct [1]

'n' in correct place [1]

Styrene is produced from cracking long chain hydrocarbons. The products of cracking include alkanes and unsaturated hydrocarbons called alkenes.

Alkenes can be made into polymers.

0	1	.	3
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What is the general formula for an alkene molecule?

[1 mark]

**C<sub>n</sub>H<sub>2n</sub>**

One example of a polymer is polythene. Polythene is made into useful objects including plastic bags.

Disposal of objects made from polystyrene can cause environmental problems.

0	1	.	4
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Explain why.

[3 marks]

**Polystyrene does not decompose. [1]**

**Burning it can cause pollution. [1]**

**If thrown in landfill it takes up space. [1]**

(Total 7 marks)

End