

OCR (B) Chemistry A-Level

OZ6 - Sustainability

Flashcards

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What effect does ozone have in the stratosphere?



What effect does ozone have in the stratosphere?

Ozone in the stratosphere absorbs high energy UV radiation which prevents damage to DNA in human skin which prevents skin damage and cancer.



What effect does ozone have at ground level (troposphere)?



What effect does ozone have at ground level (troposphere)?

Ozone causes many health problems such as respiratory problems and can cause permanent lung damage. As well as being the main component of smog ozone is also damaging to ecosystems.



How is ozone depleted in the stratosphere?



How is ozone depleted in the stratosphere?

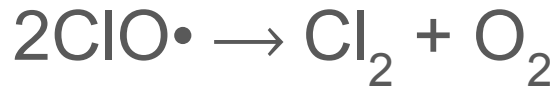
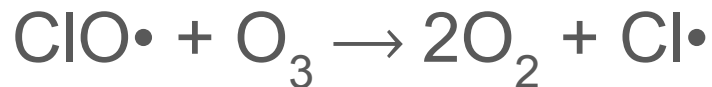
Halogenoalkanes are released into the stratosphere and form halogen radicals which catalyse the breakdown of ozone molecules.



What is the mechanism for the breakdown of ozone by chlorine radicals?



What is the mechanism for the breakdown of ozone by chlorine radicals?



How is ozone formed at ground level?



How is ozone formed at ground level?

Hydrocarbons react with nitrogen oxides in UV light to form ozone.

