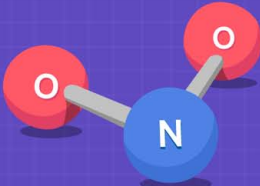


**NO<sub>2</sub>**

**Nitrogen Dioxide**

**CHEMICAL STRUCTURE:**




**DESCRIPTION:**

Nitrogen dioxide is made up of one nitrogen atom and two oxygen atoms.

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**MAIN SOURCES:**

- Power stations
- Domestic heating
- Transport



## Nitrogen dioxide is:

- **Red/brown coloured gas with a sharp, unpleasant smell.**
- **Made up of one nitrogen atom and two oxygen atoms.**
- **A secondary pollutant and is created when Nitric Oxide (NO) – formed in the combustion process – reacts with Oxygen in the atmosphere.**

The major sources of NO<sub>2</sub> in the UK are through the burning of fossil fuels (coal, oil, gas, petrol and diesel) for domestic heating, power generation and road transport. In Kent and Medway, transport emissions are thought to be the largest contributor to NO<sub>2</sub> air concentrations which are highest near busy and congested roads.

NO<sub>2</sub> can be formed naturally in the atmosphere by lightning and can also be produced by plants; although naturally formed NO<sub>2</sub> only represents fraction of the total NO<sub>2</sub> found in the atmosphere.

**Useful definition:** A primary pollutant is an air pollutant emitted directly from a source. A secondary pollutant is not directly emitted in large quantities, but forms when other pollutants (primary pollutants) react in the atmosphere.