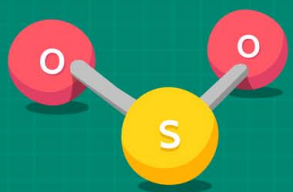


SO₂

Sulphur Dioxide

CHEMICAL STRUCTURE:




DESCRIPTION:

Sulphur dioxide is made up of one sulphur atom and two oxygen atoms.

MAIN SOURCES:

- Power stations
- Industrial combustion processes
- Shipping (in some coastal areas)
- Solid fuel burning



Sulphur Dioxide is:

- **A colourless gas and has a pungent, irritating smell.**
- **Made up of one sulphur atom and two oxygen atoms.**
- **Reacts with other chemicals to form harmful compounds such as sulphuric acid (H₂SO₄) that can cause acid rain.**

SO₂ can be formed naturally and emitted by volcanoes or from geothermal hot springs – not many of these are found in Kent! However, emissions from volcanos such as those that erupted in Iceland in 2010 can travel thousands of miles – it is not just local emissions that affect your environment.

The major sources of SO₂ in the UK have decreased significantly over the last few decades. The largest current sources of SO₂ in the UK are from the processing and burning of materials containing sulphur such as the generation of electricity from coal and oil at power stations and from combustion processes such as solid fuel burning and particularly in

industrial. Shipping emissions may also be a potential source of SO₂ in busy coastal areas.

The Kingsnorth Power Station in Kent which began operating in the 1970's closed in 2013 as it could not meet stricter emissions requirements for SO₂. Newer coal and oil fired power stations can have systems to remove large proportions of SO₂.