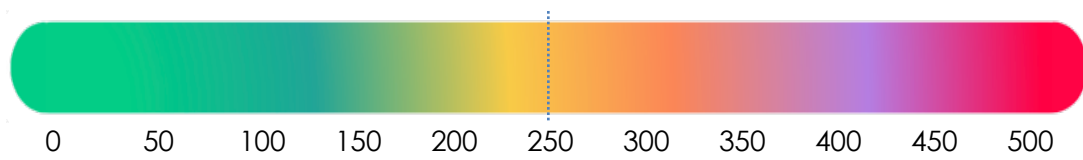




AQI

Requirement < 250

An air quality index (AQI) that is used by government agencies to communicate to the public on how polluted the air currently is, or how polluted it is forecast to become. Different countries have their own air quality index, corresponding to different national air quality standards.

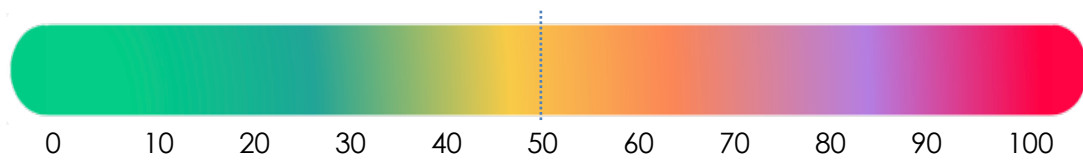


CO

Requirement < 50

Carbon monoxide is produced from the partial oxidation of carbon-containing compounds; it forms when there is not enough oxygen to produce carbon dioxide (CO₂), such as when operating a stove or an internal combustion engine in an enclosed space.

Carbon monoxide is a poisonous gas that has no smell or taste. Breathing it in can make you unwell, and it can kill if you're exposed to high levels.

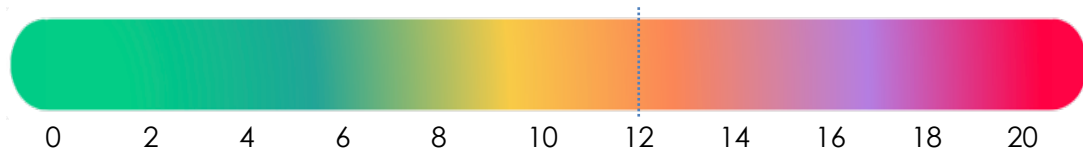


Pm10 & Pm2.5

Particulate matter (Pm) - also known as atmospheric aerosol particles - are microscopic solid or liquid matter suspended in the atmosphere of the Earth. These particles include coarse particles with a diameter of 10µm or less (Pm10) and fine particles with a diameter of 2.5µm or less (Pm2.5). Pm10 includes particles such as dust, pollen, and mold. Pm2.5 includes particles such as combustion particles, organic compounds, metals, and bacteria. The effects of inhaling particulate matter have been widely studied in humans and animals and include asthma, lung cancer, respiratory diseases, cardiovascular disease, premature delivery, birth defects, low birth weight and premature death.

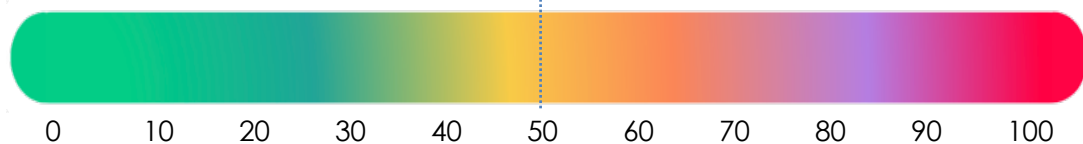
Pm2.5

Requirement < 12µg/m³



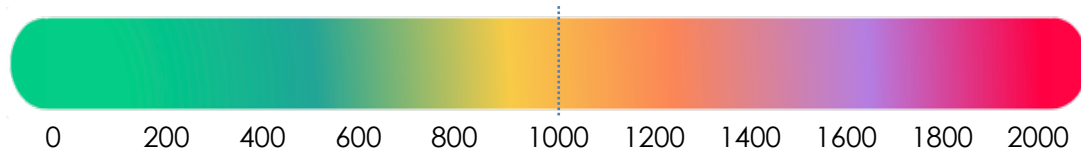
Pm10

Requirement < 50µg/m³



CO₂

Requirement < 1000ppm



Carbon dioxide (CO₂) is the gas that people exhale when breathing.

400-1,000ppm

Good - Concentrations typical of occupied indoor spaces with good air exchange

1,000-2,000ppm

Poor – people may complain of drowsiness and poor air

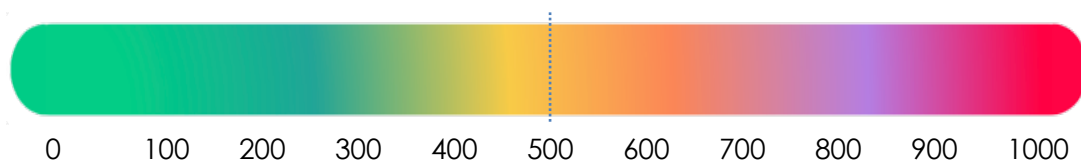
2,000-5,000ppm

Terrible - people may have Headaches, sleepiness often caused by stagnant, stale, stuffy air. Poor concentration, loss of attention, increased heart rate and slight nausea may also occur.

VOC

Requirement < 500ppm

Volatile organic compounds are compounds that easily become vapours or gases. They are released from burning fuels such as petrol, diesel, wood, coal or natural gas. They are also released from many consumer products such as cigarettes, solvents, paints, glues, wood preservatives, cleaners, disinfectants, air fresheners, building materials and pesticides. Formaldehyde, ethanol, toluene and benzene are just a few examples of VOC's. Not all VOC's are harmful, but a large number of them are. Some of the health effects of VOC's are short-term, such as irritation of the eyes, headaches, and dizziness. Others have long term effects such as fatigue, loss of coordination, liver and kidney damage and even cancer.



Ethanol

Please note that Long Term Exposure Limits (LTEL) differ substantially for different compounds

Benzene for example has an LTEL of 5 ppm!

For further information on the UK VOC recommendations under COSHH Regulations see:

<https://www.hse.gov.uk/pubns/mdhs/pdfs/mdhs96.pdf>