

Carbon Monoxide (CO)

Carbon monoxide is a colourless, odourless, and tasteless gas that is slightly lighter than air. In the presence of oxygen, carbon monoxide burns with a blue flame, producing carbon dioxide. Carbon monoxide is produced from the partial oxidation of carbon-containing compounds. It forms when there is not enough oxygen to produce carbon dioxide, such as when operating a stove or an internal combustion engine in an enclosed space.

Carbon monoxide is toxic to humans and animals when exposed at high concentrations. Carbon monoxide mainly causes adverse effects in humans by combining with hemoglobin to form carboxyhemoglobin in the blood. This prevents hemoglobin from releasing oxygen leading to hypoxia. Exposures to a high concentration can lead to significant toxicity of the central nervous system and even death. Symptoms of mild acute poisoning include light headedness, confusion, headaches, vertigo, and flu-like effects. Chronic exposure to low levels of carbon monoxide can lead to depression, confusion, and memory loss.

The current AAAQO for Carbon monoxide are:

- 1-hour average AAAQO = 13 ppm; and
- 8-hour average AAAQO = 5 ppm.