

## Carbon Dioxide

Specification	G Cylinder
Cylinder Contents m3 (101.325kPa @ 15°C)	30kg
Water Capacity per cylinder	50L
Cylinder Pressure – kPa @ 15°C	5000
Cylinder Colour	Green Grey
Outlet Connection	Type 30
Dimensions	230mm x 1619mm

Cylinder dimensions are approximate – variations occur due to manufacturing tolerances. Height includes the valve.

### Typical Analysis

Product Name	CO2	O2	Moisture
Carbon Dioxide	99.5%	<30ppm	<20ppm

#### Description

Carbon Dioxide is a non-flammable gas which does not support combustion. It is colourless and odourless and non-toxic.

#### Typical uses

The food industries consume most of the carbon dioxide produced. It is employed for;

- Carbonation of soft drinks, lemonade, soda etc
- Recharging of natural mineral waters with carbon dioxide
- Tapping of beer and prevention of oxidation through contact with the air
- Accelerating the growth of farm produce as an atmosphere additive

It is employed in the chemical industry in the following applications;

- Tanning of hides
- Production of paints and varnishes
- Ph control of some sedentary alkalis

It is used in the fabrication industry in the following way;

- MIG welding usually with flux core wires

#### Main Hazards

Inhalation of carbon Dioxide in high concentration is dangerous to respiration. At very high concentrations leads to loss of consciousness and eventually death.

**Storage and handling**

- Keep cylinders upright and protect the valve from physical damage. Secure cylinders when standing.
- Ensure all cylinders are correctly labelled
- Ensure area is well ventilated. Check regularly for leaks. Close all valves when not in use.
- Ensure all regulators and fittings are free from dust and oil
- External storage is preferred. Do not store cylinders in an area where any leaking gas could accumulate
- If valve is damaged, do not attempt to operate
- Never use lubricants to valves or regulators
- If valve does not operate by hand, return the cylinder to the supplier (attach a faulty cylinder tag)

Note: Only regulators, manifolds and ancillary equipment, rated for the appropriate pressure and compatible with the relevant gas, shall be connected to or downstream of these cylinders.

**In case of leaks**

- Remove to well ventilated area
- Stop leak if possible to do so
- Evacuate away from direction of movement of gas
- If leak cannot be stopped, move cylinder to a safe area and allow to empty
- When empty, close the valve and return the cylinder to the supplier with faulty tag attached
- Notify the supplier about the leak

Revised  
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