

Carbon Dioxide. (CO₂)

Liquefied and welding-ready, with food-grade available — filled by weight in Guwahati.

From the weld pool to the bottling line, carbon dioxide earns its keep across industry. KIGL supplies CO₂ as a liquefied gas, filled by weight for a full charge every time, at our PESO-approved Noonmati facility — with the consistency the North East has counted on for seventy-five years.

99.9%

Food-grade purity available

IS 307

Industrial grade standard

Liquefied

Filled by weight, full charge

75 yrs

Manufacturing excellence,
serving North East India

GRADES

PARAMETER	CO ₂ INDUSTRIAL	CO ₂ FOOD GRADE
Purity (CO ₂ , v/v)	≥ 99.0%	≥ 99.9%
Moisture	Controlled	Low; dew-point controlled
Odour / taste	—	Free from foreign odour and taste
Reference standard	IS 307	IS 307 & beverage-industry practice

Values verified per filling batch; Certificate of Conformity on request. Dry ice (solid CO₂) available on request.

From weld pool to bottling line.

In MIG/MAG welding, CO₂ gives deep penetration and an economical arc; blended with argon it smooths the transfer for cleaner finishing. In food and beverage work the same molecule carbonates, chills and preserves — which is why food-grade purity, odour and taste control matter. KIGL fills both grades by weight so every cylinder arrives with its full charge.

PHYSICAL PROPERTIES

PROPERTY	VALUE
Molecular weight	44.01
State of product in cylinder	Liquefied gas under pressure
Sublimation point at 1 atm (°C)	-78.5
Vapour pressure at 20 °C (bar g)	~56
Gas density at 20 °C, 1 atm (kg/m ³)	1.84

PROPERTY	VALUE
Relative density (air = 1)	1.53
Critical temperature (°C)	31.1
Appearance / odour	Colourless; slightly pungent at high concentration
Flammability	Non-flammable
Main hazard	Asphyxiant; physiologically active at high concentration

USES & APPLICATIONS

One gas, two worlds — fabrication and food. KIGL CO₂ serves both:

WELDING & FABRICATION

- MIG/MAG shielding gas, pure or in argon mixes
- Deep-penetration welding of structural steel
- Flux-cored arc welding gas
- Purging and weight-testing applications

FOOD, BEVERAGE & PROCESS

- Beverage carbonation and dispense
- Food chilling, freezing and dry ice
- Modified-atmosphere packaging
- Water pH control and fire protection

Recommended control equipment available from KIGL: CO₂ regulators (heated versions for high withdrawal rates), changeover manifolds and dispense equipment.

SAFE HANDLING

- **CO₂ is an asphyxiant and physiologically active** — concentrations above 0.5% affect breathing well before oxygen runs short. Ventilate work areas.
- **CO₂ is heavier than air** and accumulates in pits, cellars and low points; never enter a suspect space without testing the atmosphere.
- Liquid withdrawal and rapid discharge produce dry ice and severe cold burns — use gloves and eye protection.
- Cylinders are filled by weight: never refill or top up by pressure, and keep them below 45 °C.
- Secure cylinders upright; use regulators rated for CO₂ service and leak-test with soap solution.

Let's talk gas.

ENQUIRIES · ORDERS · EQUIPMENT

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Also: Oxygen · Medical Oxygen · Nitrogen · Argon · Acetylene · Mixtures