

# CARBON DIOXIDE LIQUID

Technical  
Information



## Food Grade

### Product Description

CARBON DIOXIDE is an odorless, colorless gas shipped under pressure as a liquid. Upon release from the pressurized container, the chemical sublimates from liquid form directly to solid form at -109.3°F. Contact with the solid can cause frostbite. CARBON DIOXIDE absorbs readily into water to form carbonic acid which is typically referred to as carbonated water.

### Application Recommendations

- **The International Society of Beverage Technologists** ([www.bevtech.org](http://www.bevtech.org)) establishes the specifications and testing methods for beverage grade carbon dioxide. See publication: ANSI/AWWA B510-00 *American Water Works Association Standard for Carbon Dioxide* for the carbon dioxide specification.
- Consult your Dyno Nobel representative for additional details.

### Transportation, Storage and Handling

- Frequently check the oxygen level if working in an area where carbon dioxide has the potential to be present in high concentration.
- The Compressed Gas Association ([www.cganet.com](http://www.cganet.com)) has thoroughly addressed transportation, storage and handling of carbon dioxide in available publications.
  - AV-7 Characteristics and Safe Handling of Carbon Dioxide
  - G-6 Carbon Dioxide
  - G-6.1 Standard for Insulated Carbon Dioxide Systems at Customer Sites
  - G-6.2 Commodity Specifications for Carbon Dioxide
  - P-1 Safe Handling of Compressed Gases in Containers
  - SB-2 Oxygen-Deficient Atmospheres
  - CGA Handbook of Compressed Gases, Forth Edition
  - P-27 Recommended Hose Management Practice for Uninsulated Stainless Steel Cryogenic Cargo Tank Hose

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## Properties

MSDS  
#1118

Carbon Dioxide % by volume minimum	≤ 99.99
Ammonia by volume, ppm	≤ 2.5
Argon/Oxygen by volume, ppm	≤ 30
Carbon Monoxide by volume, ppm	≤ 10
Carbonyl Sulfide by volume, ppm	≤ 0.1
Hydrocarbon, total volatile by volume, ppm	≤ 50
Hydrogen Sulfide by volume, ppm	≤ 0.1
Methane by volume, ppm	≤ 20
Nitric Oxide by volume, ppm	≤ 2.5
Nitrogen Dioxide by volume, ppm	≤ 2.5
Sulfur Dioxide by volume, ppm	≤ 1
Water by volume, ppm	≤ 20
Weight @ 50°F lbs/gallon	9.48

### Hazardous Shipping Description

Trailers must be marked with the words "Carbon Dioxide Refrigerated Liquid". The trailer must have a Nonflammable Gas placard (hazard classification 2.2) on both sides and both ends. The shipment further may be marked with international transportation number UN 1013 to identify it as carbon dioxide which may be incorporated into the placard. Consult MSDS #1118 for more specific and comprehensive information about chemical hazards.



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