

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) 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) 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

Product Disclaimer Dyno Nobel Inc. and its subsidiaries disclaim any warranties with respect to this product, the safety or suitability thereof, or the results to be obtained, whether express or implied, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND/OR OTHER WARRANTY. Buyers and users assume all risk, responsibility and liability whatsoever from any and all injuries (including death), losses, or damages to persons or property arising from the use of this product. Under no circumstances shall Dyno Nobel Inc. or any of its subsidiaries be liable for special, consequential or incidental damages or for anticipated loss of profits.

NCSH-05-08-18-15

Dyno Nobel Inc.

2795 East Cottonwood Parkway, Suite 500, Salt Lake City, Utah 84121 USA
Phone 800-732-7534 Fax 801-328-6452 Web www.dynonobel.com

Properties

SDS
#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.



DYNO
Dyno Nobel

Groundbreaking Performance