

Carbon Dioxide (CO₂)

A colorless, odorless nonflammable, liquefied gas.

Grade	% Purity	H ₂ O	THC	Ar	CO	N ₂	O ₂
SFE ⁽¹⁾	99.9995 ⁽³⁾	1	0.5 ⁽⁴⁾	1	1	5	1
SFC ⁽²⁾	99.999 ⁽³⁾	3	1 ⁽⁴⁾	1	1	5	1
Research Plus	99.999 ⁽³⁾	2	0.5			4	1
Research	99.999 ⁽³⁾	3	1	1	1	5	1
Semiconductor ^(#)	99.995	5	5 ⁽⁴⁾				
LaserPlus™ - Ultra	99.996 ⁽⁵⁾	5	1				10
LaserPlus™	99.995 ⁽⁵⁾	5	5				
Laser™	99.99 ⁽⁵⁾	10	10			70	20
Pure Clean	99.995	5	5 ⁽⁴⁾				
Instrument/Coleman	99.99	10	10			70	20
Refrigerant (R744)	99.99	10					
Anaerobic	99.9			10			10
Bone Dry	99.9	10					

Concentrations given are ppm by volume unless otherwise specified.

Notes

⁽¹⁾ SFE grade also carries a Halocarbon spec of ≤ 1 ppb. THC spec is <0.5ppm for C1-C6 hydrocarbons and <10ppb for C7-C26 hydrocarbons.

⁽²⁾ SFC grade also carries a Halocarbon spec of ≤ 10 ppb.

⁽³⁾ Total indicated components must be less than stated impurity.

⁽⁴⁾ C1 through C6

⁽⁵⁾ Details of Laser grades can be found in the Special Applications section.

^(#) Semiconductor grade valve material is brass for standard CGA connection. Cylinders can be provided with SS or DISS valves and additional proper regulator options upon request.

PRODUCT	Ordering Information					Equipment Recommendations					
	Cylinder Size	Contents lbs	Standard Valve Outlet (CGA)	Product Number	Cylinder Pressure at 70°F (psig)	Description Product Number	Delivery Pressure Range (psig)	Page Number			
SFE	150A	39	320	CD SFE15AS	835	Cylinder Connection Kit Y99-TP18C320K	N/A	E148			
	Certificate of Analysis included. Equipped with siphon tube. Up to 2000 psig Helium head option available.										
SFC	150A	39	320	CD SFC15AS	835	Cylinder Connection Kit Y99-TP18C320K	N/A	E148			
	Certificate of Analysis included.										
Research	200	60	320	CD R200	835	Two-Stage Regulators Y12-N245 * 320 Y12-244 * 320 Single-Stage Regulators Y11-N245 * 320 Y11-244 * 320	A = 0-25 B = 0-50 D = 0-100 E = 0-150 F = 0-250 G = 0-500**	E21 E12			
	150A	39	320	CD R15A	835						
Certificate of Analysis included.											
Individual or Batch Certificate of Analysis available upon request.											
Semiconductor	200	60	320	CD SM200	835	Two-Stage Regulators Y12-N245 * 320 Y12-244 * 320 Single-Stage Regulators Y11-N245 * 320 Y11-244 * 320	A = 0-25 B = 0-50 D = 0-100 E = 0-150 F = 0-250 G = 0-500**	E20 E11			
	150A	39	320	CD SM15A	835						
Individual or Batch Certificate of Analysis available upon request.											
Individual or Batch Certificate of Analysis available upon request.											
Pure Clean	200	60	320	CD PC200S	835	Two-Stage Regulators Y12-215 * 320 Single-Stage Regulator Y11-215 * 320	A = 0-25 B = 0-50 D = 0-100 E = 0-150 F = 0-250 G = 0-500**	E9 E8			
	Individual or Batch Certificate of Analysis available upon request.										
Instrument/Coleman	200	60	320	CD I200S	835				Two-Stage Regulators Y12-215 * 320 Single-Stage Regulator Y11-215 * 320	A = 0-25 B = 0-50 D = 0-100 E = 0-150 F = 0-250 G = 0-500**	E9 E8
	80	26	320	CD I80S	835						
Individual or Batch Certificate of Analysis available upon request.											
For cooling applications order this product with a siphon tube for liquid withdrawal. Add "S" to the end of the product number.											
Refrigerant	200	60	320	REFR744R200	835	Two-Stage Regulators Y12-215 * 320 Single-Stage Regulator Y11-215 * 320	A = 0-25 B = 0-50 D = 0-100 E = 0-150 F = 0-250 G = 0-500**	E9 E8			
	80	26	320	REFR744R80	835						
Individual or Batch Certificate of Analysis available upon request.											
Individual or Batch Certificate of Analysis available upon request.											
Anaerobic	200	60	320	CD AN200	835	Two-Stage Regulators Y12-215 * 320 Single-Stage Regulator Y11-215 * 320	A = 0-25 B = 0-50 D = 0-100 E = 0-150 F = 0-250 G = 0-500**	E9 E8			
	80	26	320	CD AN80	835						
Individual or Batch Certificate of Analysis available upon request.											
Individual or Batch Certificate of Analysis available upon request.											
Bone Dry	200	60	320	CD BD200	835	Two-Stage Regulators Y12-215 * 320 Single-Stage Regulator Y11-215 * 320	A = 0-25 B = 0-50 D = 0-100 E = 0-150 F = 0-250 G = 0-500**	E9 E8			
	80	26	320	CD BD80	835						
Individual or Batch Certificate of Analysis available upon request.											
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* Insert Delivery Pressure Range Code
** Single Stage Only

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Technical Data & Shipping Information		For LaserPLUS™ Applications, see SA17. Need Dry Ice? You'll find it with us. Ask your local Airgas representative.
Molecular Weight	44.0095	
Specific Volume	8.79 cf/lb @70° F & 1 ATM	
Flammability Limits in Air	Nonflammable	
U.S. DOT Name	Carbon Dioxide	
ID Number	UN 1013	
U.S. DOT Hazard Class	2.2	
U.S. DOT Label	Nonflammable Gas	
CAS Registry	124-38-9	



Ask about our unique SFE/SFC Cylinder connection designed specifically for supercritical applications.