

Nitrogen (N₂)

A colorless, odorless, nonflammable gas or a colorless, odorless, nonflammable cryogenic liquid.

Grade	% Purity	O ₂	H ₂ O	THC	CO	CO ₂	H ₂	NO _x	SO ₂
Alphagaz Nano™	99.9999	10 ppb	20 ppb	100 ppb					
Research Plus	99.9999	0.2	0.2	0.1	0.3	0.1			
Research	99.9997	0.5	0.5	0.2	0.5	0.5	2		
Semiconductor(®)	99.9993	1	1	0.5	1	1			
Continuous Emissions Monitoring	99.9995			0.1	0.5	1		0.1	0.1
Ultra-Pure Carrier (UPC)	99.9993	1	1	0.5	1 ⁽¹⁾	1 ⁽¹⁾			
Vehicle Emissions Part (1065)	99.999	2		0.05	1	1		0.02	
Alphagaz1 with SMARTOP™	99.999	1	1	0.5	1	1			
Ultra High Purity (UHP)	99.999	1	1	0.5	1	1			
High Pressure	99.998	5	3						

Concentrations given are ppm by volume unless otherwise specified.

Notes

Purities do not include Argon impurities @ <100 ppm

⁽¹⁾ Combined CO and CO₂ shall not exceed 1 ppm.

^(®) 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 ft³	Standard Valve Outlet (CGA)	Product Number	Cylinder Pressure at 70°F (psig)	Description Product Number	Delivery Pressure Range (psig)	Page Number
Alphagaz Nano	300	304	580	NI NANO300	2,640	Two stage regulator Y12- NANOB580-AL	B = 2-75	
	Certificate of Conformance included.							
Research Plus	300	304	580	NI RP300	2,640	Two-Stage Regulator Y12-1215 * 580	A = 0-30 B = 2-75 C = 4-150	
	200	235	580	NI RP200	2,200			
	80	93	580	NI RP80	2,200			
	35	36	580	NI RP 35	2,200			
Certificate of Analysis included.								
Research	300	304	580	NI R300	2,640	Single-Stage Regulator Y11-1213 * 580		
	200	235	580	NI R200	2,200			
	80	93	580	NI R80	2,200			
	35	36	580	NI R35	2,200			
Certificate of Analysis included.								
Semiconductor	300	304	580	NI SM300	2,640			
	200	235	580	NI SM200	2,220			
Individual or Batch Certificate of Analysis available upon request.								
Continuous Emissions Monitoring (CEM)	300	304	580	NI CZ300	2,640	Two-Stage Regulator Y12-N245 * 580	A = 0-25 B = 0- 50 D = 0- 100 G=0 – 500**	E20
	200	235	580	NI CZ200	2,200			
	15A	144	580	NI CZ15A	2,200			
	80	93	580	NI CZ80	2,200			
	35	36	580	NI CZ35	2,200			
Batch Certificate of Analysis included. Complies with 40 CFR Part 72.2 for Continuous Emissions Monitoring								
Ultra-Pure Carrier (UPC)	300	304	580	NI UPC300	2,640	Single-Stage Regulator Y11-N245 * 580	*Insert delivery pressure range code	**Single stage only
	200	235	580	NI UPC200	2,200			
	80	93	580	NI UPC80	2,200			
	35	36	580	NI UPC35	2,200			
	Individual of Batch Certificate of Analysis available upon request.							

Nitrogen (N₂) Cont.

A colorless, odorless, inert compressed gas at high pressure.

PRODUCT	Ordering Information					Equipment Recommendations		
	Cylinder Size	Contents ft³	Standard Valve Outlet (CGA)	Product Number	Cylinder Pressure at 70°F (psig)	Description Product Number	Delivery Pressure Range (psig)	Page Number
Vehicle Emissions Part 1065	300	304	580	NI CZ300	2,640	Two-Stage Regulator Y12-N245 * 580	A = 0-25 B = 0-50 D = 0-100	E21
	200	235	580	NI CZ200	2,200			
	15A	144	580	NI CZ15A	2,200			
	80	93	580	NI CZ80	2,200			
	35	36	580	NI CZ35	2,200			
	Batch Certificate of Analysis included. Complies with 40 CFR Part 1065.750							
Alphagaz1 with SMARTOP	300	304	580	NI AZ1300SMT	2,640	Two-Stage Regulator Y12-244*-580	A = 0-25 B = 0-50 D = 0-100	E12
	Individual of Batch Certificate of Analysis available upon request.							
Ultra High Purity (UHP)	300	304	580	NI UHP300	2,640	Single-Stage Regulator Y11-244 * 580		E11
	200	235	580	NI UHP200	2,200			
	80	93	580	NI UHP80	2,200			
	35	36	580	NI UHP35	2,200			
	Individual of Batch Certificate of Analysis available upon request.							
High Pressure	6K	482	677	NI HP6K	6,000	Single-Stage Regulators Y11- 12900CS677-AL	A=200-3500 B=400-6000	
	3K	337	680	NI HP3K	3,500			
	Individual of Batch Certificate of Analysis available upon request.					Y11-12900*B680- AL	A=200-1500 B=300-3500	
Liquid	Various sizes, volumes and grades available upon request. Individual or Batch Certificate of Analysis available upon request.					*Insert delivery pressure range code		

Technical Data & Shipping Information

Molecular Weight	28.0134
Specific Volume	13.81 cf/lb @70° F & 1 ATM
Flammability Limits in Air	Nonflammable
U.S. DOT Name	Nitrogen, Compressed
ID Number	UN 1066
U.S. DOT Hazard Class	2.2
U.S. DOT Label	Nonflammable Gas
CAS Registry	7727-37-9



Airgas offers a wide range of gas supply modes, including High-pressure cylinders, liquid cylinders (or dewars), MicroBulk and bulk. Your Airgas specialty gas representative can help you decide which option is best for your operation. Be sure to ask about our unique line of specialty gas equipment, including automatic changeover systems for uninterrupted gas supply.