

Nitrogen (N₂)


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

Purity Specifications	Minimum Purity	O ₂	H ₂ O	THC	CO	CO ₂	H ₂	NO _x	SO ₂
BIP® Technology	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		
Continuous Emissions Monitoring	99.9995%	< 0.5	< 1	< 0.1	< 0.5	< 1		< 0.1	< 0.1
Ultra Pure Carrier	99.9993%	< 1	< 1	< 0.5	* < 0.5	* < 0.5			
Ultra High Purity	99.999%	< 1	< 1	< 0.5					
Zero	99.998%	< 4	< 3	< 0.5					
High Purity	99.998%	< 5	< 3						
High Pressure / High Purity	99.998%	< 5	< 3						

Concentrations given are ppm by volume unless otherwise specified.


* CO + CO₂ < 1 ppm

PRODUCT	Ordering Information					Equipment Recommendations		
	Cylinder Size	Contents ft ³	Standard Valve Outlet (CGA)	Product Number	Cylinder Pressure at 70°F (psig)	Description Product Number	Delivery Pressure Range (psig)	Page Number
BIP® Technology	300	304	580	NI BIP300	2,640			
	Certificate of Conformance included.							
Research Plus	300	304	580	NI RP300	2,640	Two-Stage Regulators Y12-SR145 * 580 Y12-N145 * 580 Y12-S265 * 580	A = 0-25 B = 0-50 D = 0-100	E19 E14 E24
	200	235	580	NI RP200	2,200			
	80	93	580	NI RP80	2,200			
	35	36	580	NI RP35	2,200			
Total impurities guaranteed < 1 ppm. Individual Certificate of Analysis included.								
Research	300	304	580	NI R300	2,640	Single-Stage Regulators Y11-N145 * 580 Y11-244 * 580 Y11-S265 * 580	A = 0-25 B = 0-50 D = 0-100	E13 E10 E23
	200	235	580	NI R200	2,200			
	80	93	580	NI R80	2,200			
	35	36	580	NI R35	2,200			
Total impurities guaranteed < 3 ppm. Individual Certificate of Analysis or rigorous application of SPC provided upon request.								
* Insert Delivery Pressure Range Code								
Continuous Emissions Monitoring (CEM)	300	304	580	NI CZ300	2,640			
	200	235	580	NI CZ200	2,200			
	150A	144	580	NI CZ15A	2,000			
	80	93	580	NI CZ80	2,200			
35	36	580	NI CZ35	2,200				
Batch Certificate of Analysis included.								
Ultra Pure Carrier (UPC)	300	304	580	NI UPC300	2,640	Two-Stage Regulators Y12-N145 * 580 Y12-244 * 580	A = 0-25 B = 0-50 D = 0-100	E14 E11
	200	235	580	NI UPC200	2,200			
	80	93	580	NI UPC80	2,200			
	35	36	580	NI UPC35	2,200			
Total Impurities < 3 ppm. An individual or batch analysis is available upon request at a nominal charge. Certificate of Conformance provided upon request.								
Ultra High Purity (UHP)	300	304	580	NI UHP300	2,640	Single-Stage Regulators Y11-N145 * 580 Y11-244 * 580	E = 0-150 F = 0-250 G = 0-500**	E13 E10
	200	235	580	NI UHP200	2,200			
	80	93	580	NI UHP80	2,200			
	35	36	580	NI UHP35	2,200			
An individual or batch analysis is available upon request at a nominal charge. Certificate of Conformance provided upon request.								
Zero	300	304	580	NI Z300	2,640			
	200	235	580	NI Z200	2,200			
	80	93	580	NI Z80	2,200			
	35	36	580	NI Z35	2,200			
An individual or batch analysis is available upon request at a nominal charge. Certificate of Conformance provided upon request.								
* Insert Delivery Pressure Range Code								
** Single Stage Only								

BIP® purifier technology is an  innovation. BIP® is a registered trademark of Air Products and Chemicals, Inc. (US Trademark 2,521,752). BIP® purifier technology is protected by US patent no. 0591840.

Nitrogen (N₂) Cont.

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

PRODUCT	Ordering Information					Equipment Recommendations		
	Cylinder Size	Contents ft ³	Standard Valve Outlet (CGA)	Product Number	Cylinder Pressure at 70°F (psig)	Description Product Number	Delivery Pressure Range (psig)	Page Number
High Purity (HP) 	300	304	580	NI HP300	2,640	Two-Stage Regulators Y12-N145 * 580 Y12-244 * 580 Single-Stage Regulators Y11-N145 * 580 Y11-244 * 580	A = 0-25 B = 0-50 D = 0-100 E = 0-150 F = 0-250 G = 0-500**	E14 E11 E13 E10
	200	235	580	NI HP200	2,200			
	80	93	580	NI HP80	2,200			
	35	36	580	NI HP35	2,200			
	An individual or batch analysis is available upon request at a nominal charge. Certificate of Conformance provided upon request.							
High Pressure / High Purity	6K	482	677	NI HP6K	6,000	Single-Stage Regulators Y11-N115H580 Y11-N198J (CGA)† Y11-N198K (CGA)†	0-2,000 0-4,000 0-6,000	E54 E54 E54
	4K	337	680	NI HP3K	3,500			
	An individual or batch analysis is available upon request at a nominal charge. Certificate of Conformance provided upon request.							
Liquid	Various sizes and volumes available upon request.							

For Laser Grade, see Special Applications Section

Technical Data & Shipping Information		For LaserPLUS™ Applications, see SA17.
Molecular Weight	28.01	
Specific Volume	13.8 cf/lb @70° F	
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 unique *BIP*® technology gases in argon, helium and nitrogen. *BIP* technology (an Air Products innovation) provides premium-grade purity at costs you would expect to pay for zero-grade gas using a purifier built into the cylinder. For details, see Special Applications section.



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.