

Argon (Ar)

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

Grade	% Purity	O ₂	H ₂ O	THC	CO	CO ₂	N ₂
BIP® Technology	99.9999	10ppb	20ppb	100ppb			
Research Plus	99.9999	0.1	0.2	0.1	0.1	0.1	2
Research ⁽¹⁾	99.9997	0.2	0.5	0.2	0.5	0.5	3
Ultra Pure Carrier (UPC)	99.9993	0.5	0.5	0.3	1 ⁽²⁾	1 ⁽²⁾	5
Semiconductor ^(#)	99.999	1	1	0.5	1 ⁽²⁾	1 ⁽²⁾	5
Ultra High Purity (UHP)	99.999	1	1	0.5	1 ⁽²⁾	1 ⁽²⁾	5
LaserPLUS™	99.998		5	1			
Zero Grade	99.998	4	3	0.5			
High Purity/High Pressure	99.998	4	3				

Concentrations given are ppm by volume unless otherwise specified.

Notes

⁽¹⁾ The total impurities shall not exceed 3ppm.

⁽²⁾ Total impurity CO + CO₂

^(#) 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 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	336	580	AR BIP300	2,640	Single-Stage Regulators Y12-N145 * 580 Two-Stage Regulators Y11-N145 * 580 Y11-245 * 580	A = 0-25 B = 0-50 D = 0-100 E = 0-150 F = 0-250 G = 0-500**	E21 E20
	Certificate of Conformance included.							
Research Plus	300	336	580	AR RP300	2,640			
	200	251	580	AR RP200	2,200			
	150A	152	580	AR RP15A	2,000			
Certificate of Analysis included.								
Research	300	336	580	AR R300	2,640			
	200	251	580	AR R200	2,200			
	150A	152	580	AR R15A	2,000			
	80	99	580	AR R80	2,200			
	35	39	580	AR R35	2,200			
Certificate of Analysis included.								
Ultra Pure Carrier (UPC)	300	336	580	AR UPC300	2,640			
	200	251	580	AR UPC200	2,200			
	80	99	580	AR UPC80	2,200			
	35	39	580	AR UPC35	2,200			
Individual or Batch Certificate of Analysis available upon request.								
Semiconductor	300	336	580	AR SM300	2,640			
	200	251	580	AR SM200	2,200			
Individual or Batch Certificate of Analysis available upon request.								

* Insert Delivery Pressure Range Code



Argon (Ar) Cont.

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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
Ultra High Purity (UHP) 	300	336	580	AR UHP300	2,640			
	200	251	580	AR UHP200	2,200			
	80	99	580	AR UHP80	2,200			
	35	39	580	AR UHP35	2,200			
	Individual or Batch Certificate of Analysis available upon request.							
Zero 	300	336	580	AR Z300	2,640	Two-Stage Regulator Y12-244 * 580 Y12-N245 * 580	A = 0-25 B = 0-50 D = 0-100 E = 0-150 F = 0-250 G = 0-500**	E12 E21
	200	251	580	AR Z200	2,200			
	80	99	580	AR Z80	2,200			
	35	39	580	AR Z35	2,200			
	Individual or Batch Certificate of Analysis available upon request.							
High Pressure / High Purity	300	336	580	AR HP300	2,640	Single-Stage Regulator Y11-244 * 580 Y11-N245 * 580		E11 E20
	200	251	580	AR HP200	2,200			
	80	99	580	AR HP80	2,200			
	35	39	580	AR HP35	2,200			
	6K	566	580	AR HP6K	6,000			
	3K	382	580	AR HP3K	3,500			
Certificate of Analysis included.								
Liquid	Various grades, sizes, and volumes available upon request. Individual or Batch Certificate of Analysis available upon request.					* Insert Delivery Pressure Range Code ** Single Stage Only		

Technical Data & Shipping Information	
Molecular Weight	39.948
Specific Volume	9.68 cf/lb @70° F & 1 ATM
Flammability Limits in Air	Nonflammable
U.S. DOT Name	Argon, Compressed
ID Number	UN 1006
U.S. DOT Hazard Class	2.2
U.S. DOT Label	Nonflammable Gas
CAS Registry	7440-37-1

For LaserPLUS™ Applications, see SA17.



Airgas provides BIP® Gases in argon, helium and nitrogen, all with premium-grade purity. The BIP® Technology, with the purifier inside, is more efficient than traditional point-of-use purifiers, since the process takes place in the high-pressure, lower-velocity environment within the cylinder. That more thoroughly exposes the purifier medium to any impurities. Traditional in-line purifiers operate in low- pressure, high-velocity conditions, which is less ideal. External purifiers also introduce the potential for leaks and require constant maintenance.

All BIP® built-in purifiers use a 0.5 micron frit to filter particles. The purifiers go through rigorous testing and are guaranteed for the life of the cylinder.



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.

Airgas Quality Policy

The purpose of the Airgas Quality System is to continually improve our manufacturing and related processes to provide our customers with the highest product purity, consistency, and service.