

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 (3)
Alphagaz Nano™	99.9999	10 ppb	20 ppb	100 ppb			5
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
Semiconductor(2)	99.9993	1	1	0.5	1(2)	1(2)	5
Ultra-Pure Carrier (UPC)	99.9993	0.5	0.5	0.3	1(2)	1(2)	5
Alphagaz1 with SMARTOP™	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
ICP-UHP Liquid	99.999	2	1	0.5	1	1	5
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

(2) Semiconductor grade valve material is brass for standard CGA connection. Cylinders can be provided with SS or DISS valves.

(3) Nitrogen listed for reference only, not included in purity calculation

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	336	580	AR NANO300	2,640	Two stage regulator Y12- NANOB580-AL	B = 2-75	
	Certificate of Conformance included							
Research Plus	300 200 150A	336 251 152	580 580 580	AR RP300 AR RP200 AR RP15A	2,640 2,200 2,000	Two-Stage Regulator Y12-1215 * 580	A = 0-30 B = 2-75 C = 4-150	
	Certificate of Analysis included							
Research	300 200 150A 80 35	336 251 152 99 39	580 580 580 580 580	AR RP300 AR RP200 AR RP15A AR RP80 AR RP35	2,640 2,200 2,000 2,200 2,200	Single-Stage Regulator Y11-1213 * 580		
	Certificate of Analysis included							
Semiconductor	300 200	336 251	580 580	AR SM300 AR SM200	2,640 2,200	Two-Stage Regulator Y12-N245 * 580	A = 0-25 B = 0- 50 D = 0- 100 G=0 – 500**	E21
	Individual or Batch Certificate of Analysis available upon request							
Ultra-Pure Carrier (UPC)	300 200 80 35	336 251 99 39	580 580 580 580	AR UPC300 AR UPC200 AR UPC80 AR UPC35	2,640 2,200 2,200 2,200	Single-Stage Regulator Y11-N245 * 580 *Insert delivery pressure range code	**Single stage only	E20
	Individual or Batch Certificate of Analysis available upon request							

Argon (Ar) Cont.

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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
Alphagaz1 with SMARTOP	300	336	580	AR AZ1300SMT	2,640	Two-Stage Regulator Y12-244*-580	A = 0-25 B = 0-50 D = 0-100	E12
	Individual or Batch Certificate of Analysis available upon request							
Ultra High Purity (UHP)	300	336	580	AR UHP300	2,640	Single-Stage Regulator Y11-244 * 580		E11
	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								
ICP-UHP Liquid	180 Liter	4884	580	AR ICP180LT230	230	Single-Stage Regulator Y11LC25*580-AG	A = 0-25 B = 0-50 D = 0-100	
	230 Liter	6073	580	AR ICP230LT230	230			
Individual Certificate of Analysis available upon request								
High Pressure	6K	566	677	AR HP6K	6,000	Single-Stage Regulators Y11- 12900CS677-AL	A=200-3500 B=400-6000	
	3K	382	680	AR HP3K	3,500			
Individual or Batch Certificate of Analysis available upon request					Y11-12900*B680- AL A=200-1500 B=300-3500			

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



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.