

Pure Gases




Argon (Ar)

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	N ₂
BIP® Technology	99.9999%	< 10 ppb	< 20 ppb	< 100 ppb			< 5
Research Plus	99.9999%	< 0.1	< 0.2	< 0.1	< 0.1	< 0.1	< 0.8
Research	99.9997%	< 0.2	< 0.5	< 0.2	< 0.5	< 0.5	< 3
Ultra Pure Carrier (UPC)	99.9995%	< 0.5	< 0.5	< 0.3	< 1	< 1	< 5
Ultra High Purity (UHP)	99.999%	< 1	< 1	< 0.5	< 0.5*	< 0.5*	
Zero	99.998%	< 4	< 3	< 0.5			
Prepurified (PP)	99.998%	< 3	< 3				
High Purity (HP)	99.998%	< 4	< 3				
High Pressure/High Purity	99.998%	< 4	< 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	336	580	AR BIP300	2,640	Two-Stage Regulators Y12-N145 * 580 Y12-SR145 * 580 Single-Stage Regulator Y11-N145 * 580	A = 0-25 B = 0-50 D = 0-100 E = 0-150 F = 0-250	E14 E19 E13
	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			
Total impurities guaranteed < 1 ppm. Individual 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			
Total impurities guaranteed < 3 ppm. Individual Certificate of Analysis or rigorous application of SPC provided upon request.								
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			
An individual or batch analysis is available upon request at a nominal charge. Certificate of Conformance provided upon request.								
* Insert Delivery Pressure Range Code								
Ultra High Purity (UHP) 	300	336	580	AR UHP300	2,640	Two-Stage Regulator Y12-244 * 580 Single-Stage Regulator Y11-244 * 580	A = 0-25 B = 0-50 D = 0-100 E = 0-150 F = 0-250 G = 0-500**	E11 E10
	200	251	580	AR UHP200	2,200			
	80	99	580	AR UHP80	2,200			
	35	39	580	AR UHP35	2,200			
An individual or batch analysis is available upon request at a nominal charge. Certificate of Conformance provided upon request.								
Zero 	300	336	580	AR Z300	2,640			
	200	251	580	AR Z200	2,200			
	80	99	580	AR Z80	2,200			
	35	39	580	AR 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								

Pure Gases

Argon (Ar) Cont.

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

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
Pre-Purified (PP) 	300	336	580	AR PP300	2,640	Two-Stage Regulators Y12-244 * 580	A = 0-25 B = 0-50 D = 0-100 E = 0-150 F = 0-250 G = 0-500**	E11
	200	251	580	AR PP200	2,200			
	80	99	580	AR PP80	2,200			
	35	39	580	AR PP35	2,200			
An individual or batch analysis is available upon request at a nominal charge. Certificate of Conformance provided upon request.								
High Purity (HP) 	300	336	580	AR HP300	2,640	Single-Stage Regulator Y11-244 * 580	A = 0-25 B = 0-50 D = 0-100 E = 0-150 F = 0-250 G = 0-500**	E10
	200	251	580	AR HP200	2,200			
	80	99	580	AR HP80	2,200			
	35	39	580	AR 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	566	677	AR HP6K	6,000	Single-Stage Regulators Y11-N115H (CGA)† Y11-N198 * (CGA)† Y11-820 * (CGA)†	H = 0-2,000** J = 0-4,000** K = 0-6,000**	E53 E54
	3K	382	680	AR 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.							

* Insert Delivery Pressure Range Code
 **Single Stage Only

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 **Single Stage Only
 †Insert CGA Valve Number

Technical Data & Shipping Information		For LaserPLUS™ Applications, see SA17.
Molecular Weight	39.95	
Specific Volume	9.68 cf/lb @70° F	
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 unique *BIP*® technology 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.