

Argon. Compressed Gases Data Sheet.

Argon Argon is the most abundant noble gas with a concentration of approximately 0.93% in air. In the earth's atmosphere, it is the third most common gas after nitrogen and oxygen.

It is a non-reactive gas and is very inert, making it useful in a variety of industries.

Specifications

	Ultra High Purity	High Purity
BOC Material Code	262	062
Ar	≥99.999%	≥99.997%
H ₂ O	<2 ppm	<10 ppm
O ₂	<1 ppm	<5 ppm
C _n H _m	<0.2 ppm	-
CO	<0.2 ppm	-
N ₂	<5 ppm	<15 ppm
H ₂	<1 ppm	-
CO ₂	<0.5 ppm	-
Cylinder Size - Pressure	D, E - 163 bar G2 - 200 bar COP16 - 300 bar	D, E - 158 bar G - 169 bar G2 - 200 bar JAY15, KAY4, KAY9, KAY15 - 300 bar

Physical Properties

Property	Value
CAS Registry Number	7440-37-1
Atomic Weight	39.948 g/mol
Boiling Point (at 1.013 bar)	-185.87°C / 87.28 K
Density (at 1.013 bar, 15°C)	1.691 kg/m ³
Vapour Pressure, 0°C	-
Vapour Pressure, 20°C	-
Flammability in air (% volume)	Non-combustible
Specific Volume (at 1.013 bar, 15°C)	0.591 m ³ /kg

Dangerous Goods Information

UN Number	Dangerous Goods Class
1006	2.2
ARGON, COMPRESSED	



Compatibility

Legend: ✓ Good, • Fair, ✗ Avoid

Aluminium	✓	Copper	✓	Polyethylene	✓
Buna® N	✓	Kel-F®	✓	PVC	✓
Brass	✓	Monel®	✓	Stainless steel	✓
Butyl rubber	✓	Neoprene®	✓	Teflon®	✓
Carbon steel	✓	Nylon®	✓	Viton®	✓

Industries



Auto



Chem



Energy



Food



Manuf



Medical



Metal



OEM



Petrol



Pharma



R & D



Semi

Recommended
Cylinder Regulator

BASELINE®	Max. Outlet Pressure		Outlet	Product Code	
	Bar	psi		Brass	Stainless Steel
Single Stage	1	15	1/4"	S5724-516-255	M5730-507-255
			1/8"	M5724-515-255	M5730-506-255
	3.5	50	1/4"	S5725-516-255	M5731-507-255
			1/8"	M5725-515-255	M5731-506-255
	7	100	1/4"	M5726-516-255	M5732-507-255
			1/8"	M5726-515-255	M5732-506-255
	10.5	150	1/4"	S5727-516-255	M5733-507-255
			1/8"	M5727-515-255	M5733-506-255
	17	250	1/4"	M5728-516-255	M5734-507-255
			1/8"	M5728-515-255	M5734-506-255
	35	500	1/4"	M5729-516-255	M5735-507-255
			1/8"	M5729-515-255	M5735-506-255
Dual Stage	1	15	1/4"	S5628-516-255	M5633-507-255
			1/8"	M5628-515-255	M5633-506-255
	3.5	50	1/4"	S5629-516-255	M5634-507-255
			1/8"	M5629-515-255	M5634-506-255
	7	100	1/4"	M5630-516-255	M5635-507-255
			1/8"	M5630-515-255	M5635-506-255
	10.5	150	1/4"	S5631-516-255	M5636-507-255
			1/8"	M5631-515-255	M5636-506-255
	17	250	1/4"	S5632-516-255	M5637-507-255
			1/8"	M5632-515-255	M5637-506-255

Applications

Analytical

- Carrier gas in sputtering, plasma etching and ion implantations
- Blanket atmosphere in crystal growth
- Inductively Coupled Plasma (ICP) spectroscopy
- Atomic absorption spectroscopy as a blanket gas in the graphite furnace
- Geiger-counting tubes
- Carrier gas

Food and Beverage

- Production of wine

Manufacturing

- Filling of incandescent (filament) lamps, phosphorescent and thyratron radio tubes
- Insulation gas in high-efficiency multi-pane windows to improve thermal insulation
- Shielding gas for arc welding
- Refining of stainless steel
- Protective atmosphere for heat treatment of certain metals
- Prevention of oxidation of molten metals and alloys
- Degassing and desulphurisation of molten steel and iron baths
- Excimer lasers

Pharmaceutical

- Extension of product life in the pharmaceutical industry

