



# NITROGEN (N<sub>2</sub>) CGA-580

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

**Toxicity:** Simple asphyxiant.

**Compatible Materials:** Non-corrosive; most common structural materials can be used.

**Molecular Weight:** 28.01

**Specific Volume at 70°F and 1 atm:** 13.80 ft<sup>3</sup>/lb

**DOT Hazard Class:** Nonflammable Gas (2.2)

**DOT Label:** Nonflammable Gas

**DOT ID No.:** UN 1066

**CAS No.:** 7727-37-9

\*Batch Analysis or individual Certificate of Analysis Available at additional nominal charge.

NITROGEN, Electronic Grade, VLSI, Grade 5.6				Minimum Purity 99.9996%	
Order Size	Product Code	Approximate Capacity	Approximate Pressure	Guaranteed Spec. (Molar ppm)	
				Ar < 25	CO < 1
025	02181025S	23 Cu. ft	2000 P.S.I.	O <sub>2</sub> < 1	H <sub>2</sub> < 0.1
244	02181244S	230 Cu. ft	2200 P.S.I.	THC < 0.5	H <sub>2</sub> O < 0.5
300	02181300S	305 Cu. ft	2400 P.S.I.	CO <sub>2</sub> < 0.5	N <sub>2</sub> O < 0.1

NITROGEN, Research Grade 5.5				Minimum Purity 99.9995%	
Order Size	Product Code	Approximate Capacity	Approximate Pressure	Guaranteed Spec. (Molar ppm)	
					H <sub>2</sub> < 2
025	02184025S	23 Cu. ft	2000 P.S.I.	Ar < 25	N <sub>2</sub> O < 0.1
244	02184244S	230 Cu. ft	2200 P.S.I.	CO < 1.0	O <sub>2</sub> < 1
300	02184300S	305 Cu. ft	2400 P.S.I.	CO <sub>2</sub> < 0.5	THC < 0.2

NITROGEN, Ultra Pure Carrier Grade				Minimum Purity 99.9993%	
Order Size	Product Code	Approximate Capacity	Approximate Pressure	Guaranteed Spec. (Molar ppm)	
025	02179025S	23 Cu. ft	2000 P.S.I.	O <sub>2</sub> < 1	
244	02179244S	230 Cu. ft	2200 P.S.I.	H <sub>2</sub> O < 1	
300	02179300S	305 Cu. ft	2400 P.S.I.	THC < 0.5	

NITROGEN, Ultra Purity (U.H.P.) Grade 5.0				Minimum Purity 99.999%	
Order Size	Product Code	Approximate Capacity	Approximate Pressure	Guaranteed Spec. (Molar ppm)	
025	02178025S	23 Cu. ft	2000 P.S.I.	O <sub>2</sub> < 4.0	
244	02178244S	230 Cu. ft	2200 P.S.I.	H <sub>2</sub> O < 1.5	
300	02178300S	305 Cu. ft	2400 P.S.I.	THC < 0.5	



## Nitrogen (N<sub>2</sub>) Continued

### NITROGEN, HIGH PRESSURE Grade 4.8

Minimum Purity 99.998%

Order Size	Product Code	Approximate Capacity	Approximate Pressure	Guaranteed Spec. (Molar ppm)
6000	02174244S	505 Cu. ft	6000 P.S.I.	H <sub>2</sub> O < 3.5 THC < 0.5 O <sub>2</sub> < 5

### NITROGEN, Zero Grade 4.8

Minimum Purity 99.998%

Order Size	Product Code	Approximate Capacity	Approximate Pressure	Guaranteed Spec. (Molar ppm)
025	02175025S	23 Cu. ft	2000 P.S.I.	O <sub>2</sub> < 5
244	02175244S	230 Cu. ft	2200 P.S.I.	H <sub>2</sub> O < 3.5
300	02175300S	305 Cu. ft	2400 P.S.I.	THC < 0.5

### NITROGEN, Pre-purified Grade 4.7

Minimum Purity 99.997%

Order Size	Product Code	Approximate Capacity	Approximate Pressure	Typical Impurities (Molar ppm)
025	02172025S	23 Cu. ft	2000 P.S.I.	O <sub>2</sub> < 15
244	02172244S	230 Cu. ft	2200 P.S.I.	H <sub>2</sub> O < 8
300	02172300S	305 Cu. ft	2400 P.S.I.	

### NITROGEN, High Pure Grade 4.6

Minimum Purity 99.996%

Order Size	Product Code	Approximate Capacity	Approximate Pressure	Typical Impurities (Molar ppm)
025	02169025S	23 Cu. ft	2000 P.S.I.	O <sub>2</sub> < 20
244	02169244S	230 Cu. ft	2200 P.S.I.	H <sub>2</sub> O < 17
300	02169300S	305 Cu. ft	2400 P.S.I.	

### NITROGEN, Liquid Grade 4.8

Minimum Purity 99.998%

Order Size	Product Code	Approximate Capacity	Approximate Pressure	Typical Impurities (Molar ppm)
196	01100196L	196 Liters	22-235 P.S.I.	H <sub>2</sub> O < 1.5
240	01100240L	230 Liters	22-235 P.S.I.	O <sub>2</sub> < 15



## Nitrogen (N<sub>2</sub>) Continued

### NITROGEN, Liquid Grade 4.8

Minimum Purity 99.998%

Order Size	Product Code	Approximate Capacity	Typical Impurities (Molar ppm)
05	01100005L	5 Liters	O <sub>2</sub> < 10
10	01100010L	10 Liters	
15	01100015L	15 Liters	
20	01100020L	20 Liters	
30	01100030L	30 Liters	
50	01100050L	50 Liters	

### NITROGEN NF, Medical Grade 3.5

Minimum Purity 99.95%

Order Size	Product Code	Approximate Capacity	Capacity Liters	Approximate Pressure	Typical Impurities (Molar ppm)
012	01090012M	14 Cu. ft	391	2000 P.S.I.	O <sub>2</sub> < 50
025	01090025M	23 Cu. ft	651	2000 P.S.I.	CO <10
060	01090060M	45 Cu. ft	1,724	2000 P.S.I.	Odor-none
122	01090122M	115 Cu. ft	3,257	2200 P.S.I.	Discernable
244	01090244M	230 Cu. ft	6,514	2200 P.S.I.	
300	01090300M	305 Cu. ft	8,637	2400 P.S.I.	
360	01090360M	360 Cu. ft	10,195	3600 P.S.I.	

### NITROGEN, Standard Grade 3.5

Minimum Purity 99.95%

Order Size	Product Code	Approximate Capacity	Approximate Pressure	Typical Impurities (Molar ppm)
020	01090020S	15 Cu. ft	2000 P.S.I.	O <sub>2</sub> < 50
060	01090060S	45 Cu. ft	2000 P.S.I.	H <sub>2</sub> O < 27
122	01090122S	115 Cu. ft	2000 P.S.I.	
244	01090244S	230 Cu. ft	2200 P.S.I.	
300	01090300S	305 Cu. ft	2600 P.S.I.	
360	01090360S	360 Cu. ft	3600 P.S.I.	
600	01096000S	505 Cu. ft	6000 P.S.I.	

### REGULATORS

Product Code	Brand	Style	Delivery Pressure P.S.I.	Description
05382012C	Western	HSS2	0-50, 0-100, 0-250	SS-High purity two stage
05390148C	Western	LMSS-	0-45, 0-100, 0-150	Brass-High purity two stage
05390017C	Western	SG&SH	0-15, 0-45	General purpose Single Stage
05390017C	Western	SHSS	0-80, 0-150,0-180	High purity –single stage
05390080C	Meco	----	0-2100	High Pressure- Heavy Duty