



# Pure Gases

Pure Gases

## Oxygen

### Description

Formula: O<sub>2</sub>

### Gas Data

Molecular Weight: 32.00  
 Density: 1.326 kg/m<sup>3</sup> @ 21.1°C, 101.325 kPa  
 0.08279 lb/ft<sup>3</sup> @ 70°F, 14.696 psia  
 Specific Volume: 0.7541 m<sup>3</sup>/kg @ 21.1°C, 101.325 kPa  
 12.08 ft<sup>3</sup>/lb @ 70°F, 14.696 psia

### Shipping Information

CAS Registry Number: 7782-44-7  
 UN Number: UN 1072  
 ECCN Number: EAR99  
 DOT Proper Shipping Name: Oxygen, Compressed  
 DOT Classification: 2.2 (Nonflammable Gas)  
 DOT Label: NON-FLAMMABLE GAS, OXIDIZER  
 TC Shipping Name: Oxygen, Compressed  
 TC Classification: 2.2, 5.1  
 TC Label: NON-FLAMMABLE GAS,  
 NON-POISONOUS GAS, OXIDIZER

### Cylinder Specifications

Cylinder Size	Valve Outlet CGA No.	Pressure psig @ 70°F	Pressure kPa @ 21.1°C	Approximate Ship Weight	
				lb	kg
1L	540	2,640	18,202	173	78
1A	540	2,200	15,168	153	69
2	540	1,600	11,032	80	36
3	540	1,600	11,032	41	19
4	540	1,600	11,032	13	6
6	540	1,585	10,928	20	9
7B	540	1,650	11,376	6	3
7A	540	825	5,688	6	3
7	540	225	1,551	6	3
LB	170	1,600	11,032	6	3

Gas Grade Purity Specifications	Product Code	Cylinder Size	Content US	Content Metric	Equipment Recommendations	Model No.
<b>Oxygen, Research Purity 99.999%</b>	G2182101	1A	249 ft <sup>3</sup>	7.05 m <sup>3</sup>	Dual Stage Reg. Single Stage Reg. Flash Arrestor Leak Detector Detector Tube	Series 3810-540
<i>Guaranteed Specifications</i>	G2182140	2	70 ft <sup>3</sup>	1.98 m <sup>3</sup>		Series 3510-540
Argon < 5 ppm	G2182150	3	28 ft <sup>3</sup>	0.79 m <sup>3</sup>		6104A
Carbon Dioxide < 0.5 ppm	G2182165	4	10 ft <sup>3</sup>	0.28 m <sup>3</sup>		8081A
Carbon Monoxide < 0.5 ppm	G2182178	6	3.53 ft <sup>3</sup>	100 L		8014-159SC
Krypton < 1 ppm	G2182183	7B	1.76 ft <sup>3</sup>	50 L		
Nitrogen < 5 ppm	G2182182	7A	0.88 ft <sup>3</sup>	25 L		
THC < 0.1 ppm	G2182181	7	0.25 ft <sup>3</sup>	7 L		
Water < 1 ppm						
<i>A Certificate of Analysis is available on request at a nominal charge. Caution: Not for human consumption.</i>						



## Oxygen (continued)

Gas Grade Purity Specifications		Product Code	Cylinder Size	Content		Equipment Recommendations	Model No.
				US	Metric		
<b>Oxygen, Matheson Purity 99.997%</b>		G1885112	1L	337 ft <sup>3</sup>	9.54 m <sup>3</sup>	Dual Stage Reg.	Series 3810-540
<i>Guaranteed Specifications</i>		G1885101	1A	249 ft <sup>3</sup>	7.05 m <sup>3</sup>	Single Stage Reg.	Series 3510-540
Argon	< 15 ppm	G1885140	2	70 ft <sup>3</sup>	1.98 m <sup>3</sup>	LB Regulator	Series 3570-170
Carbon Dioxide	< 1 ppm	G1885150	3	28 ft <sup>3</sup>	0.79 m <sup>3</sup>	Flash Arrestor	6104A
Carbon Monoxide	< 1 ppm	G1885165	4	10 ft <sup>3</sup>	0.28 m <sup>3</sup>	Leak Detector	8081A
Krypton	< 10 ppm	G1885175	LB	2 ft <sup>3</sup>	56 L	Detector Tube	8014-159SC
Nitrogen	< 10 ppm						
THC	< 0.5 ppm						
Water	< 1 ppm						
<i>A Certificate of Analysis is available on request at a nominal charge.</i>							
<i>Caution: Not for human consumption.</i>							
<b>Oxygen, Ultra High Purity 99.994%</b>		G1979112	1L	337 ft <sup>3</sup>	9.54 m <sup>3</sup>	Dual Stage Reg.	Series 3120-540
<i>Guaranteed Specifications</i>		G1979101	1A	249 ft <sup>3</sup>	7.05 m <sup>3</sup>	Single Stage Reg.	Series 3530-540
Argon	< 35 ppm	G1979140	2	70 ft <sup>3</sup>	1.98 m <sup>3</sup>	LB Regulator	Series 3570-170
Carbon Dioxide	< 1 ppm	G1979150	3	28 ft <sup>3</sup>	0.79 m <sup>3</sup>	Flash Arrestor	6103A-O
Carbon Monoxide	< 1 ppm	G1979165	4	10 ft <sup>3</sup>	0.28 m <sup>3</sup>	Leak Detector	8081A
Nitrogen	< 10 ppm	G1979175	LB	2 ft <sup>3</sup>	56 L	Detector Tube	8014-159SC
THC	< 0.5 ppm						
Water	< 3 ppm						
<i>A lot analysis is available on request. Please inquire for individual cylinder analysis.</i>							
<i>Caution: Not for human consumption.</i>							
<b>Oxygen, Zero Gas 99.8%</b>		G2060112	1L	337 ft <sup>3</sup>	9.54 m <sup>3</sup>	Dual Stage Reg.	Series 3120-540
THC as CH <sub>4</sub>	< 0.5 ppm	G2060101	1A	249 ft <sup>3</sup>	7.05 m <sup>3</sup>	Single Stage Reg.	Series 3530-540
		G2060140	2	70 ft <sup>3</sup>	1.98 m <sup>3</sup>	LB Regulator	Series 3570-170
		G2060150	3	28 ft <sup>3</sup>	0.79 m <sup>3</sup>	Flash Arrestor	6103A-O
		G2060165	4	10 ft <sup>3</sup>	0.28 m <sup>3</sup>	Leak Detector	8081A
		G2060175	LB	2 ft <sup>3</sup>	56 L	Detector Tube	8014-159SC
<i>A lot analysis will be provided with each cylinder. Please inquire for individual cylinder analysis.</i>							
<i>Caution: Not for human consumption.</i>							
<b>Oxygen, Extra Dry 99.6%</b>		G1177201	1A	249 ft <sup>3</sup>	7.05 m <sup>3</sup>	Dual Stage Reg.	Series 3120-540
		G1177240	2	70 ft <sup>3</sup>	1.98 m <sup>3</sup>	Single Stage Reg.	Series 3530-540
		G1177250	3	28 ft <sup>3</sup>	0.79 m <sup>3</sup>	LB Regulator	Series 3550-170
		G1177265	4	10 ft <sup>3</sup>	0.28 m <sup>3</sup>	Flash Arrestor	6103A-O
		G1177275	LB	2 ft <sup>3</sup>	56 L	Leak Detector	8081A
						Detector Tube	8014-159SC
<i>A Certificate of Conformance will be provided on request.</i>							
<i>Caution: Not for human consumption.</i>							

⚠ WARNING: This product can expose you to chemicals including Nitrous Oxide, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

⚠ WARNING: This product can expose you to chemicals including Carbon Monoxide, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).