



Oxygen

Description

Formula: O₂

Gas Data

Molecular Weight: 32.00
 Density: 1.326 kg/m³ @ 21.1°C, 101.325 kPa
 0.08279 lb/ft³ @ 70°F, 14.696 psia
 Specific Volume: 0.7541 m³/kg @ 21.1°C, 101.325 kPa
 12.08 ft³/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

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Oxygen, Research Purity 99.998%	
<i>Guaranteed Specifications</i>	
Argon	< 5 ppm
Carbon Dioxide	< 0.1 ppm
Carbon Monoxide	< 0.1 ppm
Hydrogen	< 0.1 ppm
Krypton	< 1 ppm
Nitrogen	< 5 ppm
Nitrous Oxide	< 2 ppm
THC	< 0.1 ppm
Water	< 1 ppm

Product Code	Cylinder Size	Content US	Content Metric
G2182101	1A	249 ft ³	7.05 m ³
G2182140	2	70 ft ³	1.98 m ³
G2182150	3	28 ft ³	0.79 m ³
G2182165	4	10 ft ³	0.28 m ³
G2182178	6	3.53 ft ³	100 L
G2182183	7B	1.76 ft ³	50 L
G2182182	7A	0.88 ft ³	25 L
G2182181	7	0.25 ft ³	7 L

Equipment Recommendations

Equipment Recommendations	Model No.	Page No.
Dual Stage Reg.	Series 3810-540	318
Single Stage Reg.	Series 3510-540	312
Flash Arrestor	6104A	434
Leak Detector	8081A	404
Detector Tube	8014-159SC	392

A Certificate of Analysis is available on request at a nominal charge.
 Caution: Not for human consumption.



Oxygen (continued)

Gas Grade Purity Specifications	Product Code	Cylinder Size	Content US	Content Metric	Equipment Recommendations	Model No.	Page No.
Oxygen, Matheson Purity 99.997%	G1885112	1L	337 ft ³	9.54 m ³	Dual Stage Reg.	Series 3810-540	318
<i>Guaranteed Specifications</i>	G1885101	1A	249 ft ³	7.05 m ³	Single Stage Reg.	Series 3510-540	312
Argon < 15 ppm	G1885140	2	70 ft ³	1.98 m ³	LB Regulator	Series 3570-170	314
Carbon Dioxide < 1 ppm	G1885150	3	28 ft ³	0.79 m ³	Flash Arrestor	6104A	434
Carbon Monoxide < 1 ppm	G1885165	4	10 ft ³	0.28 m ³	Leak Detector	8081A	404
Krypton < 10 ppm	G1885175	LB	2 ft ³	56 L	Detector Tube	8014-159SC	392
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>							
Oxygen, Ultra High Purity 99.994%	G1979112	1L	337 ft ³	9.54 m ³	Dual Stage Reg.	Series 3120-540	299
<i>Guaranteed Specifications</i>	G1979101	1A	249 ft ³	7.05 m ³	Single Stage Reg.	Series 3530-540	313
Argon < 35 ppm	G1979140	2	70 ft ³	1.98 m ³	LB Regulator	Series 3570-170	314
Carbon Dioxide < 1 ppm	G1979150	3	28 ft ³	0.79 m ³	Flash Arrestor	6103A-O	434
Carbon Monoxide < 1 ppm	G1979165	4	10 ft ³	0.28 m ³	Leak Detector	8081A	404
Nitrogen < 10 ppm	G1979175	LB	2 ft ³	56 L	Detector Tube	8014-159SC	392
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>							
Oxygen, Zero Gas 99.8%	G2060112	1L	337 ft ³	9.54 m ³	Dual Stage Reg.	Series 3120-540	299
THC as CH ₄ < 0.5 ppm	G2060101	1A	249 ft ³	7.05 m ³	Single Stage Reg.	Series 3530-540	313
	G2060140	2	70 ft ³	1.98 m ³	LB Regulator	Series 3570-170	314
	G2060150	3	28 ft ³	0.79 m ³	Flash Arrestor	6103A-O	434
	G2060165	4	10 ft ³	0.28 m ³	Leak Detector	8081A	404
	G2060175	LB	2 ft ³	56 L	Detector Tube	8014-159SC	392
<i>A lot analysis will be provided with each cylinder. Please inquire for individual cylinder analysis.</i>							
<i>Caution: Not for human consumption.</i>							
Oxygen, Extra Dry 99.6%	G1177201	1A	249 ft ³	7.05 m ³	Dual Stage Reg.	Series 3120-540	299
	G1177240	2	70 ft ³	1.98 m ³	Single Stage Reg.	Series 3530-540	313
	G1177250	3	28 ft ³	0.79 m ³	LB Regulator	Series 3550-170	314
	G1177265	4	10 ft ³	0.28 m ³	Flash Arrestor	6103A-O	434
	G1177275	LB	2 ft ³	56 L	Leak Detector	8081A	404
					Detector Tube	8014-159SC	392
<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.

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