



Propane

Description

Formula: C₃H₈

Gas Data

Molecular Weight: 44.10
 Density: 1.8580 kg/m³ @ 21.1°C, 101.325 kPa
 0.11599 lb/ft³ @ 70°F, 14.696 psia
 Specific Volume: 0.53821 m³/kg @ 21.1°C, 101.325 kPa
 8.6214 ft³/lb @ 70°F, 14.696 psia

Safety Information

LFL in Air: 2.1%
 UFL in Air: 9.5%

Shipping Information

CAS Registry Number: 74-98-6
 UN Number: UN 1978
 ECCN Number: 1C982
 DOT Proper Shipping Name: Propane
 DOT Classification: 2.1 (Flammable Gas)
 DOT Label: FLAMMABLE GAS
 TC Shipping Name: Propane
 TC Classification: 2.1
 TC Label: FLAMMABLE GAS

Cylinder Specifications

Cylinder Size	Valve Outlet CGA No.	Pressure psig @ 70°F	Pressure kPa @ 21.1°C	Approximate Ship Weight	
				lb	kg
1F	510	110	757	182	83
1A	510	110	757	167	76
2	510	110	757	87	39
3	510	110	757	44	20
4	510	110	757	24	11
6	510	110	757	20	9
7	510	110	757	6	3
LB	170	110	757	6	3

Gas Grade Purity Specifications	Product Code	Cylinder Size	Content US	Metric	Equipment Recommendations	Model No.	Page No.
Propane, Research Purity 99.999%	G2285106	1F	100 lb	45.36 kg	Single Stage Reg. LB Regulator Tee Purge Personal Monitor Leak Detector Detector Tube Outlet Plug Wrench Flash Arrestor	Series 3530-510 Series 3550-180 4753-510 IQ250 8057 8014-125SA TW-4 6103A-F	313 314 423 398 402 392 430 434
<i>Typical Analysis (mol/mol units)</i>	G2285101	1A	35 lb	15.88 kg			
<i>Liquid Phase Analysis</i>	G2285140	2	13 lb	5.90 kg			
Carbon Dioxide < 1 ppm	G2285150	3	5 lb	2.27 kg			
Nitrogen < 2 ppm	G2285165	4	2 lb	0.91 kg			
Oxygen < 1 ppm	G2285178	6	0.83 lb	375 gm			
Other Hydrocarbons < 8 ppm	G2285181	7	0.39 lb	175 gm			
Propylene < 2 ppm							
Water < 2 ppm							
<i>A Certificate of Analysis is available on request at a nominal charge.</i>							
<i>*Analysis for sulfurs, alcohols and hydrides can be done on a custom basis. Please inquire for more information.</i>							
Propane, Matheson Purity 99.99%	G1886206	1F	100 lb	45.36 kg	Single Stage Reg. LB Regulator Tee Purge Personal Monitor Leak Detector Detector Tube Outlet Plug Wrench	Series 3530-510 Series 3550-180 4753-510 IQ250 8057 8014-125SA TW-4	313 314 423 398 402 392 430
<i>Typical Analysis (mol/mol units)</i>	G1886201	1A	35 lb	15.88 kg			
<i>Liquid Phase Analysis</i>	G1886240	2	13 lb	5.90 kg			
Carbon Dioxide < 2 ppm	G1886250	3	5 lb	2.27 kg			
Nitrogen < 10 ppm	G1886265	4	2 lb	0.91 kg			
Oxygen < 2 ppm	G1886278	6	0.83 lb	375 gm			
Other Hydrocarbons < 80 ppm	G1886281	7	0.39 lb	175 gm			
Propylene < 10 ppm							
Water < 3 ppm							
<i>A Certificate of Analysis is available on request at a nominal charge.</i>							
<i>Analysis for sulfurs, alcohols and hydrides can be done on a custom basis. Please inquire for more information.</i>							
Propane, Ultra High Purity 99.9%	G1980506	1F	100 lb	45.36 kg	Single-Stage Reg. LB Regulator Tee Purge Personal Monitor Leak Detector Detector Tube Outlet Plug Wrench Flash Arrestor	Series 3530-510 Series 3550-180 4753-510 IQ250 8057 8014-125SA TW-4* 6103A-F	313 314 423 398 402 392 430 434
<i>Typical Analysis (mol/mol units)</i>	G1980501	1A	35 lb	15.88 kg			
<i>Liquid Phase Analysis</i>	G1980540	2	13 lb	5.90 kg			
Carbon Dioxide < 20 ppm	G1980550	3	5 lb	2.27 kg			
Nitrogen < 10 ppm	G1980565	4	2 lb	0.91 kg			
Oxygen < 25 ppm	G1980578	6	0.83 lb	375 gm			
Other Hydrocarbons < 900 ppm	G1980581	7	0.39 lb	175 gm			
Propylene < 200 ppm	G1980575	LB	0.313 lb	142 gm			
Water < 5 ppm							

A lot analysis will be provided with each cylinder. Please inquire for individual cylinder analysis.
Analysis for sulfurs, alcohols and hydrides can be done on a custom basis. Please inquire for more information.
 *Except LB



Propane (continued)

Gas Grade Purity Specifications	Product Code	Cylinder Size	Content US	Content Metric	Equipment Recommendations	Model No.	Page No.
Propane, Instrument Purity 99.5% Air < 0.05%	G2471106	1F	100 lb	45.36 kg	Single Stage Reg.	Series 3530-510	313
	G2471101	1A	35 lb	15.88 kg	LB Regulator	Series 3550-180	314
	G2471140	2	13 lb	5.90 kg	Tee Purge	4753-510	423
	G2471150	3	5 lb	2.27 kg	Personal Monitor	IQ250	398
	G2471165	4	2 lb	0.91 kg	Leak Detector	8057	402
	G2471175	LB	0.313 lb	142 gm	Detector Tube	8014-1255A	392
					Outlet Plug Wrench	TW-4*	430
					Flash Arrestor	6103A-F	434
<p>LPG 5 and 10 gallon steel cylinders available with single or dual port CGA510 valves, FLET, and head pressure. Inquire. A Certificate of Conformance will be provided on request. *Except LB</p>							
Propane, CP Grade 99%	G1388206	1F	100 lb	45.36 kg	Single Stage Reg.	Series 18-510	292
	G1388201	1A	35 lb	15.88 kg	LB Regulator	Series 3320-180	302
	G1388240	2	13 lb	5.90 kg	Tee Purge	4753-510	423
	G1388250	3	5 lb	2.27 kg	Personal Monitor	IQ250	398
	G1388265	4	2 lb	0.91 kg	Leak Detector	8057	402
	G1388275	LB	0.313 lb	142 gm	Detector Tube	8014-1255A	392
					Outlet Plug Wrench	TW-4*	430
					Flash Arrestor	6103A-F	434
<p>LPG 5 and 10 gallon steel cylinders available with single or dual port CGA510 valves, FLET, and head pressure. Inquire. A Certificate of Conformance will be provided on request. By request, all except LB can be furnished with full length eductor tubes for liquid withdrawal. *Except LB</p>							
Propane, Natural Purity 93%	G1388106	1F	100 lb	45.36 kg	Single Stage Reg.	Series 18-510	292
	G1388101	1A	35 lb	15.88 kg	Tee Purge	4753-510	423
					Personal Monitor	IQ250	398
					Leak Detector	8057	402
					Detector Tube	8014-1255A	392
					Outlet Plug Wrench	TW-4	430
					Flash Arrestor	6103A-F	434
<p>A Certificate of Conformance will be provided on request. By request, can be furnished with full length eductor tubes for liquid withdrawal.</p>							