



Propylene

Description

Synonym: Propene
Formula: C₃H₆

Gas Data

Molecular Weight: 42.08
Density: 1.7692 kg/m³ @ 21.1°C, 101.325 kPa
0.11045 lbs/ft³ @ 70°F, 14.696 psia
Specific Volume: 0.56523 m³/kg @ 21.1°C, 101.325 kPa
9.0539 ft³/lbs @ 70°F, 14.696 psia

Safety Information

LFL in Air: 2%
UFL in Air: 11%

Shipping Information

CAS Registry Number: 115-07-1
UN Number: UN 1077
ECCN Number: 1C982
DOT Proper Shipping Name: Propylene
DOT Classification: 2.1 (Flammable Gas)
DOT Label: FLAMMABLE GAS
TC Shipping Name: Propylene
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	136	938	187	85
1A	510	136	938	167	76
2	510	136	938	87	39
3	510	136	938	44	20
4	510	136	938	24	11
6	510	136	938	20	9
7	510	136	938	6	3
LB	170	136	938	6	3

Gas Grade Purity Specifications	Product Code	Cylinder Size	Content US	Content Metric	Equipment Recommendations	Model No.	Page No.	
Propylene, Research Purity 99.99%	G2292106	1F	105 lb	47.63 kg	Single Stage Reg. LB Regulator Tee Purge Personal Monitor Detector Tube Outlet Plug Wrench	Series 3530-510	313	
<i>Typical Analysis (mol/mol units)</i>	G2292101	1A	35 lb	15.88 kg		Series 3550-180	314	
<i>Liquid Phase Analysis</i>	G2292140	2	13 lb	5.90 kg		4753-510	423	
Carbon Dioxide < 1 ppm	G2292150	3	5 lb	2.27 kg		IQ250	398	
Nitrogen < 5 ppm	G2292165	4	2 lb	0.91 kg		8014-185S	392	
Oxygen < 1 ppm	G2292178	6	0.88 lb	400 gm		TW-4	430	
Other Hydrocarbons < 90 ppm	G2292181	7	0.39 lb	175 gm				
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>								
Propylene, Matheson Purity 99.95%	G1887006	1F	105 lb	47.63 kg	Single Stage Reg. LB Regulator Tee Purge Personal Monitor Detector Tube Outlet Plug Wrench	Series 3530-510	313	
<i>Typical Analysis (mol/mol units)</i>	G1887001	1A	35 lb	15.88 kg		Series 3550-180	314	
<i>Liquid Phase Analysis</i>	G1887040	2	13 lb	5.90 kg		4753-510	423	
Carbon Dioxide < 2 ppm	G1887050	3	5 lb	2.27 kg		IQ250	398	
Nitrogen < 10 ppm	G1887065	4	2 lb	0.91 kg		8014-185S	392	
Oxygen < 2 ppm	G1887078	6	0.88 lb	400 gm		TW-4	430	
Other Hydrocarbons < 470 ppm	G1887081	7	0.39 lb	175 gm				
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>								
Propylene, Ultra High Purity 99.9%	G1981306	1F	105 lb	47.63 kg	Single Stage Reg. LB Regulator Tee Purge Personal Monitor Detector Tube Outlet Plug Wrench	Series 3530-510	313	
<i>Guaranteed Specifications (mol/mol units)</i>	G1981301	1A	35 lb	15.88 kg		Series 3550-180	314	
<i>Liquid Phase Analysis</i>	G1981340	2	13 lb	5.90 kg		4753-510	423	
Carbon Dioxide < 4 ppm	G1981350	3	5 lb	2.27 kg		IQ250	398	
Nitrogen < 20 ppm	G1981365	4	2 lb	0.91 kg		8014-185S	392	
Oxygen < 2 ppm	G1981378	6	0.88 lb	400 gm		TW-4*	430	
Other Hydrocarbons < 950 ppm	G1981381	7	0.39 lb	175 gm				
Water < 4 ppm	G1981375	LB	0.313 lb	142 gm				
<i>A lot analysis will be provided with each cylinder. Please inquire for individual cylinder analysis.</i>								
<i>Analysis for sulfurs, alcohols and hydrides can be done on a custom basis. Please inquire for more information.</i>								

*Except LB



Propylene (continued)

Gas Grade Purity Specifications	Product Code	Cylinder Size	Content		Equipment Recommendations	Model No.	Page No.
			US	Metric			
Propylene, Polymer Purity 99.5%	G1393206	1F	105 lb	47.63 kg	Single Stage Reg.	Series 3530-510	313
<i>Typical Analysis</i>	G1393201	1A	35 lb	15.88 kg	LB Regulator	Series 3550-180	314
Oxygen < 10 ppm	G1393240	2	13 lb	5.90 kg	Tee Purge	4753-510	423
Water < 5 ppm	G1393250	3	5 lb	2.27 kg	Personal Monitor	IQ250	398
	G1393265	4	2 lb	0.91 kg	Detector Tube	8014-185S	392
	G1393275	LB	0.313 lb	142 gm	Outlet Plug Wrench	TW-4*	430
<p><i>A Certificate of Conformance will be provided on request. A lot analysis is available at a nominal charge. *Except LB</i></p>							
Propylene, CP Grade 99%	G1393106	1F	105 lb	47.63 kg	Single Stage Reg.	Series 18-510	292
	G1393101	1A	35 lb	15.88 kg	LB Regulator	Series 3320-180	302
	G1393140	2	13 lb	5.90 kg	Tee Purge	4753-510	423
	G1393150	3	5 lb	2.27 kg	Personal Monitor	IQ250	398
	G1393175	LB	0.313 lb	142 gm	Detector Tube	8014-185S	392
					Outlet Plug Wrench	TW-4*	430
<p><i>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</i></p>							