



Ethylene

Description

Synonym: Ethene
Formula: C₂H₄

Gas Data

Molecular Weight: 28.05
Density: 1.26 kg/m³ @ 0°C, 101.325 kPa
0.0787 lb/ft³ @ 32°F, 14.696 psia
Specific Volume: 0.793 m³/kg @ 0°C, 101.325 kPa
12.7 ft³/lb @ 32°F, 14.696 psia

Safety Information

LFL in Air: 2.7%
UFL in Air: 36%

Shipping Information

CAS Registry Number: 74-85-1
UN Number: UN 1962
ECCN Number: 1C982
DOT Proper Shipping Name: Ethylene, Compressed
DOT Classification: 2.1 (Flammable Gas)
DOT Label: FLAMMABLE GAS
TC Shipping Name: Ethylene, Compressed
TC Classification: 2.1
TC Label: FLAMMABLE GAS

Cylinder Specifications

Cylinder Size	Valve Outlet CGA No.	Pressure		Approximate Ship Weight	
		psig @ 70°F	kPa @ 21.1°C	lb	kg
1A	350	1,200	8,274	152	69
1R	350	1,200	8,274	67	30
2	350	1,200	8,274	75	34
3	350	1,200	8,274	34	16
6	350	1,200	8,274	5	2
7	350	1,200	8,274	6	3
LB	170	1,200	8,274	6	3

Gas Grade Purity Specifications	Product Code	Cylinder Size	Content US	Content Metric	Equipment Recommendations	Model No.
Ethylene, Research Purity 99.999%	G2250101	1A	30 lb	13.61 kg	Dual Stage Reg. Single Stage Reg. LB Regulator Tee Purge Leak Detector Detector Tube	Series 3120-350 Series 3530-350 Series 3550-170 4753-350 8057 8014-108B
<i>Typical Analysis (mol/mol units)</i>	G2250118	1R	18 lb	8.16 kg		
Acetylene <	2 ppm G2250140	2	11 lb	4.99 kg		
Carbon Dioxide <	2 ppm G2250150	3	4.5 lb	2.04 kg		
Carbon Monoxide <	2 ppm G2250178	6	0.62 lb	280 gm		
Nitrogen <	2 ppm G2250181	7	0.31 lb	140 gm		
Oxygen <	2 ppm					
Other Hydrocarbons <	8 ppm					
Water <	3 ppm					
<i>A Certificate of Analysis is available on request at a nominal charge. Analysis for sulfurs, alcohols and hydrides can be done on a custom basis. Please inquire for more information. Not for use as a plant growth regulator.</i>						
Ethylene, Matheson Purity 99.995%	G1827901	1A	30 lb	13.61 kg	Dual Stage Reg. Single Stage Reg. LB Regulator Tee Purge Leak Detector Detector Tube	Series 3120-350 Series 3530-350 Series 3550-170 4753-350 8057 8014-108B
<i>Typical Analysis (mol/mol units)</i>	G1827918	1R	18 lb	8.16 kg		
Acetylene <	4 ppm G1827940	2	11 lb	4.99 kg		
Carbon Dioxide <	5 ppm G1827950	3	4.5 lb	2.04 kg		
Carbon Monoxide <	2 ppm G1827978	6	0.62 lb	280 gm		
Nitrogen <	5 ppm G1827981	7	0.31 lb	140 gm		
Oxygen <	2 ppm					
Other Hydrocarbons <	80 ppm					
Water <	3 ppm					
<i>A Certificate of Analysis is available on request at a nominal charge. Analysis for sulfurs, alcohols and hydrides can be done on a custom basis. Please inquire for more information. Not for use as a plant growth regulator.</i>						



Ethylene (continued)

Gas Grade Purity Specifications	Product Code	Cylinder Size	Content US	Content Metric	Equipment Recommendations	Model No.
Ethylene, Ultra High Purity 99.95%	G1920801	1A	30 lb	13.61 kg	Dual Stage Reg. Single Stage Reg. LB Regulator Tee Purge Leak Detector Detector Tube	Series 3120-350 Series 3530-350 Series 3550-170 4753-350 8057 8014-108B
<i>Typical Analysis</i>	G1920818	1R	18 lb	8.16 kg		
Carbon Dioxide < 10 ppm	G1920840	2	11 lb	4.99 kg		
Ethane < 300 ppm	G1920850	3	4.5 lb	2.04 kg		
Oxygen < 10 ppm	G1920878	6	0.62 lb	280 gm		
Propane < 10 ppm	G1920881	7	0.31 lb	140 gm		
Propylene < 50 ppm	G1920875	LB	0.25 lb	113 gm		
Water < 5 ppm						
<i>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. Not for use as a plant growth regulator.</i>						
Ethylene, Polymer Purity 99.9%	G1358401	1A	30 lb	13.61 kg	Dual Stage Reg. Single Stage Reg. LB Regulator Tee Purge Leak Detector Detector Tube	Series 3120-350 Series 3530-350 Series 3550-170 4753-350 8057 8014-108B
<i>Typical Analysis</i>	G1358440	2	11 lb	4.99 kg		
Oxygen < 10 ppm	G1358450	3	4.5 lb	2.04 kg		
Water < 5 ppm	G1358475	LB	0.25 lb	113 gm		
<i>A Certificate of Conformance will be provided upon request. A lot analysis is available at a nominal charge. Not for use as a plant growth regulator.</i>						
Ethylene, CP Grade 99.5%	G1358201	1A	30 lb	13.61 kg	Dual Stage Reg. Single Stage Reg. LB Regulator Tee Purge Leak Detector Detector Tube	Series 1250-350 Series 3530-350 Series 3550-170 4753-350 8057 8014-108B
	G1358240	2	11 lb	4.99 kg		
	G1358250	3	4.5 lb	2.04 kg		
	G1358275	LB	0.25 lb	113 gm		
<i>A Certificate of Conformance will be provided on request. Not for use as a plant growth regulator.</i>						

⚠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.