



# Ethane

## Description

Synonym: Methylmethane; Dimethyl  
Formula: C<sub>2</sub>H<sub>6</sub>

## Gas Data

Molecular Weight: 30.07  
Density: 1.280 kg/m<sup>3</sup> @ 21.1°C, 101.325 kPa  
0.07990 lb/ft<sup>3</sup> @ 70°F, 14.696 psia  
Specific Volume: 0.7813 m<sup>3</sup>/kg @ 21.1°C, 101.325 kPa  
12.52 ft<sup>3</sup>/lb @ 70°F, 14.696 psia

## Safety Information

LFL in Air: 3%  
UFL in Air: 12.5%

## Shipping Information

CAS Registry Number: 74-84-0  
I.D. Number: UN 1035  
ECCN Number: 1C982  
DOT Proper Shipping Name: Ethane, Compressed  
DOT Classification: 2.1 (Flammable Gas)  
DOT Label: FLAMMABLE GAS  
TC Shipping Name: Ethane  
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
1A	350	546	3,765	154	70
1R	350	546	3,765	70	32
2	350	546	3,765	74	34
3	350	546	3,765	32	15
6	350	546	3,765	5	2
7	350	546	3,765	6	3
LB	170	546	3,765	6	3

Gas Grade Purity Specifications	Product Code	Cylinder Size	Content US	Content Metric	Equipment Recommendations	Model No.	
<b>Ethane, Research Purity 99.999%</b>	G2243101	1A	32 lb	14.51 kg	Dual Stage Reg. Single Stage Reg. LB Regulator Tee Purge Leak Detector	Series 3120-350 Series 3530-350 Series 3550-170 4753-350 8057	
<i>Guaranteed Specifications</i>	G2243118	1R	22 lb	9.98 kg			
Other Hydrocarbons <	6 ppm	G2243140	2	10 lb			4.54 kg
Nitrogen <	3 ppm	G2243150	3	3 lb			1.36 kg
Oxygen <	1 ppm	G2243181	7	0.33 lb			150 gm
CO/CO <sub>2</sub> <	2 ppm						
Water <	3 ppm						
<i>A Certificate of Analysis is available on request at a nominal charge.</i>							
<b>Ethane, Matheson Purity 99.99%</b>	G1827001	1A	32 lb	14.51 kg	Dual Stage Reg. Single Stage Reg. LB Regulator Tee Purge Leak Detector	Series 3120-350 Series 3530-350 Series 3550-170 4753-350 8057	
<i>Guaranteed Specifications</i>	G1827018	1R	22 lb	9.98 kg			
Other Hydrocarbons <	80 ppm	G1827040	2	10 lb			4.54 kg
Nitrogen <	10 ppm	G1827050	3	3 lb			1.36 kg
Oxygen <	4 ppm	G1827081	7	0.33 lb			150 gm
CO/CO <sub>2</sub> <	8 ppm						
Water <	5 ppm						
<i>A Certificate of Analysis is available on request at a nominal charge.</i>							
<b>Ethane, Ultra High Purity 99.95%</b>	G1920101	1A	32 lb	14.51 kg	Dual Stage Reg. Single Stage Reg. LB Regulator Tee Purge Leak Detector	Series 1250-350 Series 3530-350 Series 3550-170 4753-350 8057	
<i>Guaranteed Specifications</i>	G1920118	1R	22 lb	9.98 kg			
Other Hydrocarbons <	800 ppm	G1920140	2	10 lb			4.54 kg
Nitrogen <	100 ppm	G1920150	3	3 lb			1.36 kg
Oxygen <	20 ppm	G1920175	LB	0.25 lb			113 gm
CO/CO <sub>2</sub> <	10 ppm						
Water <	5 ppm						
<i>A Certificate of Analysis is available on request at a nominal charge.</i>							
<b>Ethane, CP Grade 99%</b>	G1353201	1A	32 lb	14.51 kg	Dual Stage Reg. Single Stage Reg. LB Regulator Tee Purge Leak Detector	Series 81-350 Series 18-350 Series 3320-170 4753-350 8057	
	G1353240	2	10 lb	4.54 kg			
	G1353250	3	3 lb	1.36 kg			
	G1353275	LB	0.25 lb	113 gm			

*Liquid phase, weight/weight %*

*A Certificate of Conformance will be provided on request.*