



Ethane

Description

Synonym: Methylmethane; Dimethyl
Formula: C₂H₆

Gas Data

Molecular Weight: 30.07
Density: 1.280 kg/m³ @ 21.1°C, 101.325 kPa
0.07990 lb/ft³ @ 70°F, 14.696 psia
Specific Volume: 0.7813 m³/kg @ 21.1°C, 101.325 kPa
12.52 ft³/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		Approximate Ship Weight	
		psig @ 70°F	kPa @ 21.1°C	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	Metric	Equipment Recommendations	Model No.		
Ethane, Research Purity 99.995%	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>Typical Analysis</i>	G2243118	1R	22 lb	9.98 kg				
Acetylene < 0.5 ppm	G2243140	2	10 lb	4.54 kg				
n-Butane < 0.5 ppm	G2243150	3	3 lb	1.36 kg				
Carbon Dioxide < 1 ppm	G2243178	6	0.66 lb	300 gm				
Ethylene < 7 ppm	G2243181	7	0.33 lb	150 gm				
Hydrogen < 0.5 ppm								
Isobutane < 0.5 ppm								
Methane < 2 ppm								
Nitrogen < 4 ppm								
Oxygen < 2 ppm								
Propane < 10 ppm								
Propylene < 17 ppm								
Water < 4 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.</i>								
Ethane, Matheson Purity 99.975%	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>Typical Analysis</i>	G1827018	1R	22 lb	9.98 kg				
n-Butane < 2 ppm	G1827040	2	10 lb	4.54 kg				
Ethylene < 25 ppm	G1827050	3	3 lb	1.36 kg				
Isobutane < 1 ppm	G1827078	6	0.66 lb	300 gm				
Methane < 2 ppm	G1827081	7	0.33 lb	150 gm				
Nitrogen < 8 ppm								
Oxygen < 3 ppm								
Propane < 40 ppm								
Propylene < 100 ppm								
Water < 6 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.</i>								
Ethane, Ultra High Purity 99.95%	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>Typical Analysis</i>	G1920118	1R	22 lb	9.98 kg				
n-Butane < 2 ppm	G1920140	2	10 lb	4.54 kg				
Ethylene < 200 ppm	G1920150	3	3 lb	1.36 kg				
Methane < 5 ppm	G1920178	6	0.66 lb	300 gm				
Oxygen < 5 ppm	G1920181	7	0.33 lb	150 gm				
Propane < 60 ppm	G1920175	LB	0.25 lb	113 gm				
Propylene < 200 ppm								
Water < 10 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.</i>								



Ethane (continued)

Gas Grade Purity Specifications	Product Code	Cylinder Size	Content US	Content Metric	Equipment Recommendations	Model No.
Ethane, CP Grade 99%	G1353201	1A	32 lb	14.51 kg	Dual Stage Reg. Single Stage Reg. LB Regulator Tee Purge Leak Detector	Series 81-350
	G1353240	2	10 lb	4.54 kg		Series 18-350
	G1353250	3	3 lb	1.36 kg		Series 3320-170
	G1353275	LB	0.25 lb	113 gm		4753-350 8057
<i>Liquid phase, weight/weight % A Certificate of Conformance will be provided on request.</i>						
Ethane, Technical Purity 95%	G1353101	1A	32 lb	14.51 kg	Dual Stage Reg. Single Stage Reg. LB Regulator Tee Purge Leak Detector	Series 81-350
	G1353140	2	10 lb	4.54 kg		Series 18-350
	G1353175	LB	0.25 lb	113 gm		Series 3320-170 4753-350 8057
<i>Liquid phase, weight/weight % A Certificate of Conformance will be provided on request.</i>						