

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 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.	Page No.
Ethane, Research Purity 99.999%	G2243101	1A	32 lb	14.51 kg	Dual Stage Reg. Single Stage Reg. LB Regulator Tee Purge Personal Monitor Leak Detector	Series 3120-350 Series 3530-350 Series 3550-170 4753-350 IQ250 8057	299 313 314 423 398 402
<i>Typical Analysis (mol/mol units)</i>	G2243118	1R	22 lb	9.98 kg			
CO/CO ₂ < 2 ppm	G2243140	2	10 lb	4.54 kg			
Nitrogen < 3 ppm	G2243150	3	3 lb	1.36 kg			
Oxygen < 1 ppm	G2243178	6	0.66 lb	300 gm			
Other Hydrocarbons < 6 ppm	G2243181	7	0.33 lb	150 gm			
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.</i>							
Ethane, Matheson Purity 99.99%	G1827001	1A	32 lb	14.51 kg	Dual Stage Reg. Single Stage Reg. LB Regulator Tee Purge Personal Monitor Leak Detector	Series 3120-350 Series 3530-350 Series 3550-170 4753-350 IQ250 8057	299 313 314 423 398 402
<i>Typical Analysis (mol/mol units)</i>	G1827018	1R	22 lb	9.98 kg			
CO/CO ₂ < 8 ppm	G1827040	2	10 lb	4.54 kg			
Nitrogen < 10 ppm	G1827050	3	3 lb	1.36 kg			
Oxygen < 4 ppm	G1827078	6	0.66 lb	300 gm			
Other Hydrocarbons < 80 ppm	G1827081	7	0.33 lb	150 gm			
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.</i>							
Ethane, Ultra High Purity 99.95%	G1920101	1A	32 lb	14.51 kg	Dual Stage Reg. Single Stage Reg. LB Regulator Tee Purge Personal Monitor Leak Detector	Series 1250-350 Series 3530-350 Series 3550-170 4753-350 IQ250 8057	296 313 314 423 398 402
<i>Typical Analysis (mol/mol units)</i>	G1920118	1R	22 lb	9.98 kg			
CO/CO ₂ < 10 ppm	G1920140	2	10 lb	4.54 kg			
Nitrogen < 50 ppm	G1920150	3	3 lb	1.36 kg			
Oxygen < 10 ppm	G1920178	6	0.66 lb	300 gm			
Other Hydrocarbons < 400 ppm	G1920181	7	0.33 lb	150 gm			
Water < 5 ppm	G1920175	LB	0.25 lb	113 gm			
<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	US	Content Metric	Equipment Recommendations	Model No.	Page No.
Ethane, CP Grade 99%	G1353201	1A	32 lb	14.51 kg	Dual Stage Reg.	Series 81-350	293
	G1353240	2	10 lb	4.54 kg	Single Stage Reg.	Series 18-350	292
	G1353250	3	3 lb	1.36 kg	LB Regulator	Series 3320-170	302
	G1353275	LB	0.25 lb	113 gm	Tee Purge	4753-350	423
					Personal Monitor	IQ250	398
					Leak Detector	8057	402
<i>Liquid phase, weight/weight %</i>							
<i>A Certificate of Conformance will be provided on request.</i>							
Ethane, Technical Purity 95%	G1353101	1A	32 lb	14.51 kg	Dual Stage Reg.	Series 81-350	293
	G1353140	2	10 lb	4.54 kg	Single Stage Reg.	Series 18-350	292
	G1353175	LB	0.25 lb	113 gm	LB Regulator	Series 3320-170	302
					Tee Purge	4753-350	423
					Personal Monitor	IQ250	398
					Leak Detector	8057	402
<i>Liquid phase, weight/weight %</i>							
<i>A Certificate of Conformance will be provided on request.</i>							