



Isobutane

Description

Synonym: 2-Methylpropane
Formula: C₄H₁₀

Gas Data

Molecular Weight: 58.12
Density: 2.4787 kg/m³ @ 21.1°C, 101.325 kPa
0.15474 lb/ft³ @ 70°F, 14.696 psia
Specific Volume: 0.40344 m³/kg @ 21.1°C, 101.325 kPa
6.4625 ft³/lb @ 70°F, 14.696 psia

Safety Information

LFL in Air: 1.8%
UFL in Air: 8.4%

Shipping Information

CAS Registry Number: 75-28-5
UN Number: UN 1969
ECCN Number: 1C982
DOT Proper Shipping Name: Isobutane
DOT Classification: 2.1 (Flammable Gas)
DOT Label: FLAMMABLE GAS
TC Shipping Name: Isobutane
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
1F	510	31	211	198	90
1A	510	31	211	167	76
2	510	31	211	89	40
3	510	31	211	44	20
4	510	31	211	24	11
6	510	31	211	21	10
7	510	31	211	6	3
LB	170	31	211	6	3

Gas Grade Purity Specifications	Product Code	Cylinder Size	Content		Equipment Recommendations	Model No.	
			US	Metric			
Isobutane, Research Purity 99.995% <i>Guaranteed Specifications</i> <i>Liquid Phase Analysis</i>	G2257106	1F	116 lb	52.62 kg	Single Stage Reg. LB Regulator Tee Purge Detector Tube Outlet Plug Wrench Flash Arrestor	Series 3530-510 Series 3550-170 4753-510 8014-113SB TW-4 6103A-F	
	G2257101	1A	35 lb	15.88 kg			
	G2257140	2	15 lb	6.80 kg			
	Other Hydrocarbons < 45 ppm	G2257150	3	5 lb			2.27 kg
	Nitrogen < 10 ppm	G2257165	4	2 lb			0.91 kg
	Oxygen < 2 ppm	G2257181	7	0.44 lb			200 gm
	Water < 2 ppm						
<i>A Certificate of Analysis is available on request at a nominal charge.</i>							
Isobutane, Matheson Purity 99.99% <i>Guaranteed Specifications</i> <i>Liquid Phase Analysis</i>	G1852606	1F	116 lb	52.62 kg	Single Stage Reg. LB Regulator Tee Purge Detector Tube Outlet Plug Wrench Flash Arrestor	Series 3530-510 Series 3550-170 4753-510 8014-113SB TW-4 6103A-F	
	G1852601	1A	35 lb	15.88 kg			
	G1852640	2	15 lb	6.80 kg			
	Other Hydrocarbons < 90 ppm	G1852650	3	5 lb			2.27 kg
	Nitrogen < 20 ppm	G1852665	4	2 lb			0.91 kg
	Oxygen < 5 ppm	G1852681	7	0.44 lb			200 gm
	Water < 2 ppm						
<i>A Certificate of Analysis is available on request at a nominal charge.</i>							
Isobutane, Ultra High Purity 99.9% <i>Guaranteed Specifications</i> <i>Liquid Phase Analysis</i>	G1931106	1F	116 lb	52.62 kg	Single Stage Reg. LB Regulator Tee Purge Detector Tube Outlet Plug Wrench Flash Arrestor	Series 3530-510 Series 3550-170 4753-510 8014-113SB TW-4* 6103A-F	
	G1931101	1A	35 lb	15.88 kg			
	G1931140	2	15 lb	6.80 kg			
	Other Hydrocarbons < 1000 ppm	G1931150	3	5 lb			2.27 kg
	Nitrogen < 160 ppm	G1931165	4	2 lb			0.91 kg
	Oxygen < 40 ppm	G1931175	LB	0.375 lb			170 gm
	Water < 4 ppm						
<i>A Certificate of Analysis is available on request at a nominal charge.</i>							
<i>*Except LB</i>							



Isobutane (continued)

Gas Grade Purity Specifications	Product Code	Cylinder Size	Content US	Content Metric	Equipment Recommendations	Model No.
Isobutane, Instrument Purity 99.5% <i>Guaranteed Specifications</i> Air < 0.05 %	G2457106	1F	116 lb	52.62 kg	Single Stage Reg. LB Regulator Tee Purge Detector Tube Outlet Plug Wrench Flash Arrestor	Series 3530-510
	G2457101	1A	35 lb	15.88 kg		Series 3550-170
	G2457140	2	15 lb	6.80 kg		4753-510
	G2457150	3	5 lb	2.27 kg		8014-113SB
	G2457165	4	2 lb	0.91 kg		TW-4*
	G2457175	LB	0.375 lb	170 gm		6103A-F
<i>Liquid phase, weight/weight%</i> A Certificate of Conformance will be provided on request. A lot analysis is available at a nominal charge. *Except LB						
Isobutane, CP Grade 99%	G1363106	1F	116 lb	52.62 kg	Single Stage Reg. LB Regulator Tee Purge Detector Tube Outlet Plug Wrench Flash Arrestor	Series 18-510
	G1363101	1A	35 lb	15.88 kg		Series 3320-170
	G1363140	2	15 lb	6.80 kg		4753-510
	G1363150	3	5 lb	2.27 kg		8014-113SB
	G1363165	4	2 lb	0.91 kg		TW-4*
	G1363175	LB	0.375 lb	170 gm		6103A-F
<i>Liquid phase, weight/weight%</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. For liquids, use manual control only. *Except LB						