

# n-Butane C<sub>4</sub>H<sub>10</sub>

Synonyms: Normal Butane, Methylethylmethane, Butyl Hydride or Diethyl

### Physical Constants of Gas

Molecular Weight ..... 58.124  
 Specific Volume ..... 6.4 CF/lb. (0.4 m<sup>3</sup>/kg)  
 Boiling Point ..... 31.1°F (-0.5°C) 1 atm  
 Gas Density 70°F 1 atm ..... 2.52 kg/m<sup>3</sup>

### Cylinder Data

CGA Valve Outlet ..... 510  
 LB CGA Outlet ..... 170

### Shipping Data

Shipping Class ..... 70  
 DOT/TC Name ..... Butane  
 DOT/TC Class ..... 2.1 (Flammable Gas)  
 WHMIS Class ..... AB1  
 DOT Label ..... Flammable Gas  
 CAS Registry No. .... 106-97-8  
 UN No./ATA No. .... UN1011

### Safety Information

Flammable gas.  
 Flammability limits: lower 1.9%; upper 8.5%.  
 Not compatible with strong oxidizers.  
 Can form explosive mixture with air.  
 May cause frostbite.

Specifications									Recommended Equipment		
Grade	Purity (Minimum)	Size	Contents		Pressure		Weight		Description Model Number	Page	
			lbs.	kg	psig	bar	lbs.	kg			
CHEMGAZ 3	99.9% Liquid Phase	22LP	25	12	16	1	46	21	Single-Stage Regulator Q1-205A-4G-510 LB Regulator Q1-20BS-170 LB Control Valve Q1-30B	269	
		LB	0.4	0.2	16	1	5	2			294
CHEMGAZ 2	99.5% Liquid Phase	108*	120	55	16	1	195	89	Single-Stage Regulator Q1-205A-4G-510 LB Regulator Q1-20BS-170 LB Control Valve Q1-30B	269	
		22LP	25	12	16	1	46	21			294
		LB	0.4	0.2	16	1	4	2			332
CHEMGAZ 1	99% Liquid Phase	108*	120	55	16	1	195	89	Single-Stage Regulator Q1-205A-4G-510 LB Regulator Q1-20BS-170 LB Control Valve Q1-30B	269	
		22LP	25	12	16	1	46	21			294
		LB	0.4	0.2	16	1	4	2			332

\* Can be furnished with a full-length eductor tube and helium pressure pad upon request.

Other cylinder sizes available upon request. Air Liquide also manufactures liquid and vapor phase calibration standards in an n-butane balance for analysis of trace impurities in hydrocarbon process streams. Please contact your Air Liquide representative for more information.

Our SCOTT™ gas delivery equipment is guaranteed to preserve the purity and integrity of your gas. See page 261.