

Appendix K

Conversion Factors

To Convert from	To	Multiply by
Pressure		
Atmospheres	feet of water	33.9
Atmospheres	mm. of mercury	760.0
Atmospheres	pounds/square inch	14.696
Inches of mercury (32°F)	pounds/square inch	0.4335
Inches of mercury (32°F)	pounds/square inch	0.03614
Inches of water (40°F)	pounds/square inch	0.1934
mm. of mercury (32°F)	feet of water (40°F)	2.3066
Pounds/square inch	feet of water (40°F)	0.1934
Pounds/square inch	inches of mercury (32°F)	2.3066
Volume		
Barrels (oil)	gallons	42.0
Barrels (brewery)	gallons	31.0
Cubic cm	cubic inches	0.061023
Cubic feet	cubic inches	1728.0
Cubic feet	cubic meters	0.02832
Cubic feet	gallons	7.481
Cubic meters	gallons	264.17
Gallons	cubic feet	0.1337
Gallons	cubic inches	231.0
Gallons	gallons (British)	0.83268
Gallons	liters	3.7853
Liters	gallons	0.2642
Liters	quarts	1.0567
Heat		
Boiler horsepower (BHP)	BTU/h	33479.0
BTU/h	calories (gram)	252.0
BTU/h	calories (kg.)	0.252
Calories (gram) gram/°C	BTU/lb/°F	1.0
Calories (gram) per gram	BTU/lb	1.8
Horsepower	BTU/h	2545.0
K.W. hours	BTU	3413.0

To Convert from	To	Multiply by
Temperature		
Centigrade degrees	Fahrenheit degrees	1.8 and add 32°
Fahrenheit degrees	Centigrade degrees	Subtract 32° and multiply by 0.5555
Measurement		
Centimeters	inches	0.3937
Feet	meters	0.3048
Inches	centimeters	2.54
Kilometers	miles	0.6214
Meters	feet	3.2808
Microns	millimeters	0.001
Square meters	square feet	10.764
Weight		
Cubic feet of water (60°F)	pounds	62.37
Gallons	pounds of water (60°F)	8.34
Grains	pounds	1/7000
Grains/gallon	parts per million	17.12
Grams	grains	15.43
Kilograms	pounds	2.2046
Pounds	grams	453.59
Pounds	kilograms	0.4536
Ton (long)	tons (short)	1.12
Volumetric Rate		
Cubic feet/second	gallons/minute	448.83
Gallons/minute	cubic feet/second	0.00223
Power		
Horsepower	feet pounds/second	555.0
Horsepower	K.W.	0.745
Viscosity		
Centipoises	pounds/second/feet	0.000672
Poises	centipoises	0.01
Velocity		
Feet/second	meters/second	0.3048
Meters/second	feet/second	3.2808

