



Conversion Tables

Multiply	By	To Obtain
DENSITY		
g/cm ³	62.428	lb/ft ³
	0.03613	lb/in ³
	8.345	lb/gal
lb/ft ³	16.02	kg/m ³
g-mol of Ideal Gas @ 0°C & 760 mm Hg	22.4140	ltr
lb/in ³	1728	lb/ft ³
	27.68	g/cm ³
lb-mol of Ideal Gas @ 0°C & 760 mm Hg	359.05	ft ³
PRESSURE		
atm	101.4	kPa
	760	mm of Hg
	29.921	in of Hg
	33.93	ft of H ₂ O
	10332	kg/m ²
	14.696	lb/in ²
	2116.2	lb/ft ²
	1.0133	bar
	1.0332	kg/cm ²
bar	100	kPa
cm of Hg	5.3524	in of H ₂ O
	0.4460	ft of H ₂ O
	1.33	kPa
	0.1934	lb/in ²
	27.845	lb/ft ²
	135.95	kg/m ²
ft of H ₂ O	0.02947	atm
	0.4335	lb/in ²
	62.378	lb/ft ²
	2.99	kPa
in of Hg	0.03342	atm
	13.60	in of H ₂ O
	1.133	ft of H ₂ O
	3.389	kPa
	0.4912	lb/in ²
	70.727	lb/ft ²
	345.32	kg/m ²
in of H ₂ O	0.249	kPa
	0.03609	lb/in ²
	5.1981	lb/ft ²
	25.38	kg/m ²
kg/cm ²	0.9678	atm
	98.1	kPa
	14.22	lb/in ²
lb/in ²	70.31	g/cm ²
	6.9	kPa
	2.036	in of Hg
	2.311	ft of H ₂ O
FLOW		
ft ³ /min	472	cm ³ /sec
	0.4719	ltr/sec
ft ³ /hr	7.87	cm ³ /sec
	28.31605	ltr/hr
ft ³ /sec	28.31605	ltr/sec
	1698.963	ltr/min
	28316.847	cm ³ /sec
gal/hr	6.3090 x 10 ⁵	m ³ /min
	3.7854	ltr/hr

Key

atm	atmosphere	dyn	dyne	Hg	Mercury	k-mol	kilo mole	m ³	cubic meter
bar	bar	°F	degrees Fahrenheit	H ₂ O	water	ltr	liter	oz	ounce
Btu	British thermal unit	ft	foot	in	inch	lb	pound	P	poise
°C	degrees Centigrade	ft ²	square feet	in ²	square inches	lb mol	pound mole	qt	quart
cal	calorie, thermochemical	ft ³	cubic feet	in ³	cubic inches	m	meter	°R	degrees Rankine
cP	centipoise	g	gram	J	joule	min	minute	sec	second
cm	centimeter	gal	gallon	°K	degree Kelvin	mm	millimeter	St	Stokes
cm ²	square centimeter	g-mol	gram mole	kg	kilogram	m ²	square meter	yd ³	cubic yard
cm ³	cubic centimeter	hr	hour	kPa	Kilopascals				

Multiply	By	To Obtain
HEATING VALUE		
Btu/ft ³	0.037	J/cm ³
Btu/lb	2.32444	J/g
VOLUME		
cm ³	0.001	ltr
	0.0610	in ³
Hr	0.2642	gal
	0.0353	ft ³
	1.0567	qt
	61.025	in ³
ft ³	28317	cm ³
	1728	in ³
	0.03704	yd ³
	7.481	gal
	28.32	ltr
	0.028	m ³
in ³	16.387	cm ³
	0.01639	ltr
	4.329 x 10 ⁻³	gal
	0.01732	qt
	1.6387 x 10 ⁻³	m ³
MASS		
lb	0.4536	kg
	453.59237	g
lb of H ₂ O	0.01602	ft ³
	27.68	in ³
	0.1198	gal
oz	28.349527	g
ton (long)	1.016 x 10 ³	kg
	2.24 x 10 ³	lb
ton (short)	0.907 x 10 ³	kg
	2 x 10 ³	lb
VISCOSITY (Absolute)		
P	1	g/cm sec
	1	dyn sec/cm ²
	100	cP
cP	0.000672	lb/ft. sec
	0.0000209	lb sec/ft ²
	2.42	lb/ft hr
VISCOSITY (Kinematic)		
St	1	cm ² /sec
	0.155	in ² /sec
	0.001076	ft ² /sec
	density	P
TEMPERATURE		
°F = 1.8 (°C) + 32		
°K = °C + 273.5		
°R = °F + 459.67		
MISCELLANEOUS PHYSICAL CONSTANTS		
	NUMERICAL	UNITS
Avogadro's Number	6.0228 x 10 ²³	molecules/g-mol
Gas-Law Constant R	1.987	cal/(g-mol) (K)
	1.987	Btu/(lb-mol) (°R)
	82.06	(cm ³) (atm)/(g-mol) (K)
	0.08205	(ltr) (atm)/(g-mol)(K)
	1545.3	(ft ³) (lb force)/(lb-mol) (°R)
	0.7302	(ft ³) (atm)/(lb-mol) (°R)
	8.31432 x 10 ³	J/(k-mol) (K)