

Featured software

Distillation simulator	www.vaxasoftware.com/soft_eduen/sden.html
FunGraph - Graphs of mathematical functions	www.vaxasoftware.com/soft_eduen/fungraph.html
Design of distillation columns by McCabe-Thiele method	www.vaxasoftware.com/soft_eduen/mcth.html
Worksheets Generators for Maths and Chemistry	www.vaxasoftware.com/pc/index.html
Acid-base equilibrium calculator	www.vaxasoftware.com/soft_eduen/abew.html
Statistics and Probability tools for Windows	www.vaxasoftware.com/soft_eduen/statool.html

Name	Symbol	Value	Unit
Speed of light in vacuum	c	299 792 458 (0)	$\text{m}\cdot\text{s}^{-1}$
Permeability of vacuum	μ_0	$4\pi \times 10^{-7}$	$\text{N}\cdot\text{A}^{-2}$
Permittivity of vacuum	ϵ_0	$8.854\ 187\ 817\dots (0)\times 10^{-12}$	$\text{C}^2\cdot\text{N}^{-1}\cdot\text{m}^{-2}$
Avogadro constant	N_A	$6.022\ 141\ 79(30) \times 10^{23}$	mol^{-1}
Atomic mass unit	u	$1.660\ 538\ 782(83) \times 10^{-27}$	kg
Elementary charge	e	$1.602\ 176\ 487(40) \times 10^{-19}$	C
Electron mass	m_e	$9.109\ 382\ 15(45) \times 10^{-31}$	kg
Proton mass	m_p	$1.672\ 621\ 637(83) \times 10^{-27}$	kg
Neutron mass	m_n	$1.674\ 927\ 211(84) \times 10^{-27}$	kg
Proton-electron mass ratio	m_p/m_e	1836.152 672 47(80)	
Constant of gravitation	G	$6.674\ 28(67) \times 10^{-11}$	$\text{N}\cdot\text{m}^2\cdot\text{kg}^{-2}$
Boltzmann constant	k	$1.380\ 6504(24) \times 10^{-23}$	$\text{J}\cdot\text{K}^{-1}$
Molar gas constant	R	8.314 472(15)	$\text{J}\cdot\text{mol}^{-1}\cdot\text{K}^{-1}$
Molar gas constant	R	1.987 206 5(34)	$\text{cal}\cdot\text{mol}^{-1}\cdot\text{K}^{-1}$
Molar gas constant	R	0.082 057 46(14)	$\text{atm}\cdot\text{L}\cdot\text{mol}^{-1}\cdot\text{K}^{-1}$
Molar volume of ideal gas (S.T.P.)	V_m	22.413 996(39)	$\text{L}\cdot\text{mol}^{-1}$
Faraday constant	F	96 485.3399(24)	$\text{C}\cdot\text{mol}^{-1}$
Standard acceleration of gravity	g	9.80665 (0)	$\text{m}\cdot\text{s}^{-2}$
Coulomb's law constant	k	$8.987\ 551\ 787\ 3\dots(0)\times 10^9$	$\text{N}\cdot\text{m}^2\cdot\text{C}^{-2}$
Planck constant	h	$6.626\ 068\ 96(33) \times 10^{-34}$	J·s
	\hbar	$1.054\ 571\ 628(53) \times 10^{-34}$	J·s
Rydberg constant (infinite)	R_∞	10 973 731.568 527(73)	m^{-1}
Rydberg constant (hydrogen)	R_H	10 967 758.306	m^{-1}
Radio de Bohr	a_0	$5.291\ 772\ 0859(36) \times 10^{-11}$	m
Stefan-Boltzmann constant	σ	$5.670\ 400(40)\times 10^{-8}$	$\text{W}\cdot\text{m}^{-2}\cdot\text{K}^{-4}$
Earth mass	M_E	5.9736×10^{24}	kg
Moon mass	M_M	7.3477×10^{22}	kg
Sun mass	M_S	1.9891×10^{30}	kg
Earth equatorial radius	a	6.378140×10^6	m
Moon radius	R_M	1.738×10^6	m
Sun radius	R_S	6.960×10^8	m
Pi constant	π	3.14159 26535 89793...(0)	
e constant	e	2.71828 18284 59045...(0)	

S.T.P.: Standard temperature and pressure: $T = 0\text{ }^\circ\text{C}$, $P = 1\text{ atm} = 101\ 325\text{ Pa}$