Fundamental Physical Constants

Quantity	Symbol	Value
Avogadro's number	N_A	$6.02214129(27)\times10^{23}$ / mol
Boltzmann's constant	k_B	$1.3806488(13)\times10^{-23}$ J/K
Coulomb constant	$k_e = 1/4\pi\varepsilon_0$	$8.987551787\cdots\times10^{9}$ $\mathrm{N\cdot m^2\cdot C^{-2}}$
Elementary charge	e	$1.602176565(35)\times10^{-19}$ C
Electron mass	m_e	$9.10938215(45)\times10^{-31}$ kg
Gravitational constant	G	$6.67384(80)\cdots\times10^{-11}$ $\mathrm{N\cdot m^2\cdot kg^{-2}}$
Neutron mass	m_n	$1.674927351(74)\times10^{-27}$ kg
Permeability of free space	μ_0	$4\pi\times10^{-7}$ $\mathrm{T\cdot m/A}$
Permittivity of free space	$\varepsilon_0 = 1/\mu_0 c^2$	$8.854187817\cdots\times10^{-12}$ $\mathrm{C^2/N\cdot m^2}$
Planck's constant	h	$6.62606957(29)\times10^{-34}$ $\mathrm{J\cdot s}$
Proton mass	m_p	$1.672621777(74)\times10^{-27}$ kg
Speed of light	c	2.99792458×10^{8} $\mathrm{m\cdot s^{-1}}$

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