

Fundamental Constants

Quantity	Symbol	Value	Units
Atomic mass unit	amu	1.660538×10^{-27}	kg
Avogadro constant	N_A	6.022142×10^{23}	mol^{-1}
Faraday constant	F	9.6489×10^4	C mol^{-1}
Faraday constant	F	96.42	$\text{kJ volt}^{-1} \text{ gram}$
Gravitational constant	G	6.673×10^{-11}	$\text{m}^3 \text{ kg}^{-1} \text{ s}^{-2}$
Molar gas constant	R	8.314472	$\text{J mol}^{-1} \text{ kg}^{-1}$
Molar volume ideal gas $(T = 273.15 \text{ K}, p = 101.325)$	V_m	22.413996×10^{-3}	$\text{m}^3 \text{ mol}^{-1}$
Planck constant	h	6.626069×10^{-34}	J s
Speed of light	C_0	2.99792×10^8	m s^{-1}
Stefan-Boltzmann constant	σ	5.670400×10^{-8}	$\text{W m}^{-2} \text{ K}^{-4}$
Wien displacement law	b	2.89777×10^{-3}	m K