

2018 CODATA RECOMMENDED VALUES OF THE FUNDAMENTAL CONSTANTS OF PHYSICS & CHEMISTRY

An extensive constants list is [available](#).

(ref: NIST, [wallet size data card](#), 2019)

quantity	sym	numerical value	units
* ¹³³ Cs hyperfine transition frequency	$\Delta\nu_{\text{Cs}}$	9192631770	Hz
*speed of light in vacuum	c	299792458	m/s
*Planck constant	h	6.62607015E-34	J/Hz
*elementary charge	e	1.602176634E-19	C
*Avogadro constant	N_A	6.02214076E+23	1/mol
*Boltzmann constant	k_B	1.380649E-23	J/K
*luminous efficacy	K_{cd}	683	lm/W
electron volt [e/C]	eV	1.602176634E-19	J
h-bar constant [$h/(2\pi)$]	\hbar	~1.054571817E-34	J·s
Josephson constant [$2e/h$]	K_J	~483597.8484E+09	Hz/V
von Klitzing constant [h/e^2]	R_K	~25812.80745	Ω
molar gas constant [$N_A k_B$]	R	~8.314462618	J/mol/K
Stefan-Boltzmann const. [$(2\pi^5 k^4)/(15c^2 h^3)$]	σ	~5.670374419E-08	W/m ² /K ⁴
pi (ref: math.com)	π	~3.141592653589793	-

*Defining constants of the International System of Units (SI).

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