

The other tables previously included in this file have been migrated to glossary.md (https://github.com/suchowan/a_converter/blob/master/doc/glossary.md). Only the physical, material, and astronomical constants remain here, since their dozenal values are best presented in a fixed-width table.

Table 1 Physical, material and astronomical constants

ALL VALUES DOZENAL

Constant Symbols and Name (UNDERLINE INDICATES CONSTANT MAINTAINS SAME VALUE BETWEEN SYSTEMS u AND h)		Constant Value expressed by the Universal Unit Systems		Exponent N of $\times 10^N$	Unit Symbol (u and $\pm$ prefixes omitted)
		with the Rydberg constant (u)	Harmonic System ($\pm$)		
R_∞	Rydberg constant	1	1;00170000	6;	Ω_1/m
c_0	<u>the speed of light in vacuum</u>	1		8;	m/s
$\hbar$	<u>quantum of action</u>	1		-26;	J s
k_B	<u>Boltzmann constant</u>	1		-20;	J/K
N_A	<u>Avogadro constant</u>	1		20;	mol^{-1}
R	<u>gas constant</u>	1		0;	J/(mol K)
u	unified atomic mass unit	1;00090610	1;00240733	-20;	g
a_B	Bohr Radius	1;005E85684	1;00447X74	-9;	m
α	<u>fine structure constant</u>	1;0739940472		-2;	-
e	<u>elementary charge</u>	1;0374439E14		-14;	C
m_e	electron mass	0;E4692217E0	0;E48324X245	-23;	g
σ	<u>Stefan-Boltzmann constant</u>	1;E82E28		-1E;	$\text{W}/(\text{m}^2\text{K}^4)$
m_G	gravitic meter ($\sqrt{2E}; l_P$)	1;00186	1;00016	-27;	m
l_P	Planck length	2;0445E	2;04134	-28;	m
F_P	Planck force ($\hbar c_0 / l_P^2$)	2;XE206	2;XEE32($\div 2;E$)	35;	N
G	Newtonian constant of gravitation (c_0^4/F_P)	4;15768	4;14663	-X;	$(\text{m}^4/\text{s}^4)/\text{N}$
θ_W	<u>weak mixing angle</u>	E;304		-2;	Ω_1
V_m	molar volume of an ideal gas under standard conditions	1;02X469	1;025665	2;	m^3/mol
	black-body radiation at the ice point	0;EX2466	0;EX8784	2;	W/m^2
	maximum density of water	1;088183	1;092X47 ($\div 15;/14;$)	2;	g/m^3
	density of ice at the ice point	0;E7E9	0;E85E ($\div 1/\omega_2=34;/35;$)	2;	g/m^3
	specific heat of water	0;6052	0;6045 ($\div 1/2$)	0;	J/(g K)
	surface tension of water at 25°C	0;EE68	0;EEE4	-1;	N/m
atm	standard atmosphere	1;65008E	1;659967 ($\div 1;66$)	4;	P
g_n	standard gravitational acceleration	5;5X54XE9	5;5E21264 ($\div E;/2$)	0;	m/s^2
r_E	gravitational radius of Earth	2;41E8982X0X	0;2418030652 ($\div 1;/5$)	-1;	m
au	astronomical unit	8;X67575535	8;X55509X31	X;	m
	<u>astronomical unit</u>	9;E91731X53		-3;	$c_0 \text{ s}_E \text{ day}$