Table A1.4 Some common units

Physical quantity	Name of unit	Symbol for unit	Value*
Time	minute	min	60 s
	hour	h	3600 s
	day	d	86 400 s
Length	ångström	Å	10^{-10} m
Volume	litre	L, l	1 dm^3
Mass	tonne	t	10^3 kg
Pressure	bar	bar	10^5 Pa
	atmosphere	atm	101.325 kPa
Energy	electronvolt	eV	$1.602\,177\,33 \times 10^{-19}$ J
			96.485 31 kJ mol^{-1}

* All values in the final column are exact, except for the definition of 1 eV, which depends on the measured value of *e*.

attached to an equation number indicates that the equation is valid only for a reversible change. A superscript ° indicates that the equation is valid for an ideal system, such as a perfect gas or an ideal solution.

We use

$$p^\ominus = 1 \text{ bar} \qquad b^\ominus = 1 \text{ mol kg}^{-1} \qquad 1\, c^\ominus = 1 \text{ mol dm}^{-3}$$

When referring to temperature, T denotes a thermodynamic temperature (for instance, on the Kelvin scale) and θ a temperature on the Celsius scale.

For numerical calculations, we take special care to use the proper number of significant figures. Unless otherwise specified, assume that zeros in data like 10, 100, 1000, etc are significant (that is, interpret such data as 10., 100., 100., etc).

Further reading

I.M. Mills (ed.), *Quantities, units, and symbols in physical chemistry.* Blackwell Scientific, Oxford (1993).