GLOSSARY OF UNITS

Units are associated exclusively with the properties of the drugs described in the various records in *Drugs: Synonyms and Properties.*

The units that are used are described below.

Name	Description
Melting point	This is expressed, implicitly, in degrees Celsius. Thus 184° is given for 184°C. If any other temperature scale is used, it is identified. When melting is accompanied by decomposition, the notation (dec) is added.
Boiling point	This is also given, implicitly, in degrees Celsius. If any other temperature scale is used, it is identified. A value such as 124° implies 124°C at normal atmospheric pressure (nominally 760 mm of mercury). When other pressures are operative, they are noted, in mm Hg, as a subscript. Thus $124^{\circ}_{0.5}$ implies a boiling point of 124°C at a pressure of 0.5 mm mercury.
Density	The density, d, of materials is given in g/ml. The measurement temperature, if available, is given as a superscript, the temperature of the water reference as a subscript. Thus d_4^{25} means density at 25° referenced to water at 4°. The specific gravity (sg or SG) is the ratio of the density to that of water and is thus unitless.
Ultra-violet absorption spectra	The wavelengths, λ_m, in nm (nanometers = 10^{-7} meter) of uv maxima are given and the absorption is in most cases also cited. The absorption is cited as an ε value, an E value or an A value. The E value, as in $E^{1\%}_{1\ cm}$, is the absorption given by a 1% solution in the a cell of pathlength 1 cm and the A value, as in in $A^{1\%}_{1\ cm}$ is is the extinction value given by a 1% solution in the a cell of pathlength of 1 cm. In general E and A are logs, and are thus smaller numbers (usually 1-100) than ε, which is generally between 1,000 and 150,000.
Optical Rotation	The optical rotation, α, of compounds is given in degrees, with a cited temperature and wavelength, where available. Thus $[\alpha]_D$ means a rotation measured at the sodium D line (589 nm) and $[\alpha]^{25}$ means a rotation measured at 25° but at an unspecified wavelength. The common notation, $[\alpha]^{25}_D$ means a rotation measured at 25°C and at the D line of sodium (589 nm). The measured rotation depends upon the concentration of the solution and the nature of the solvent and both of these are cited, when available. Concentration is often given as c, the concentration in g/100 ml, and a full citation of rotation would be $[\alpha]^{25}_D = 60°$ (c = 1.25, EtOH).

Name	Description

Solubility

Solubilities are generally cited in g/100 ml of solvent. The solubility at 25° is given unless a different temperature is cited.

Acute toxicity

All the toxicity data in *Drugs: Synonyms and Properties* refer to acute toxicity and are generally cited as LD_{50} values. The LD_{50} value is the quantity of chemical that is lethal to 50% of the tested animals and is usually expressed as the dose in milligrams, per kilogram of the animal's body weight. The animal species is given, as is the administration route. Both of these are abbreviated, as in the Table below:

Species		Route	
rat	rat	iv	intravenous
mus	mouse	ip	intraperitoneal
gpg	guinea pig	sc	subcutaneous
hmtr	hamster	orl	oral
pgn	pigeon	ihl	inhalation
rbt	rabbit	im	intramuscular
qul	quail	ip	intraperitoneal
chick	chicken	gvg	gavage
dck	duck		
dog	dog		
mky	monkey		
eel	eel		

A typical toxicity citation may read: LD_{50} (mus orl) = 154 mg/kg, meaning the LD_{50} orally in mice is 154 mg/kg. Toxicity is occasionally expressed as the lethal dose (LD) which is the dose observed to cause death in all animals tested or the minimum lethal dose (MLD) which is the minimum dose, in milligrams/kilogram of body weight, observed to cause death.