Acuracy and precision

(a) Expression of concentration

The symbol "%" is normally used to express the concentration of solids in liquids, the number of grams of solute in 100 mL of product (mass per volume). If indicated, the following expressions are used:

% *m/m* for the number of grams of solute in 100 g of product

% *v/v* for the number of millilitres of solute in 100 mL of product

% *v/m* for the number of millilitres of solute in 100 g of product.

The concentration expressed as "mol/l" refers to the number of moles of the stated solute in sufficient water, or other vehicle, to produce 1000 mL.

(b) Quantities

In assays and tests with numerical limits, the quantity stated to be taken for examination is approximate. The amount actually used, which may deviate by not more than 10 per cent from that stated, is accurately weighed or measured and the result is calculated from this exact quantity. Regents are measured and the procedures are carried out with an accuracy commensurate with the degree of precision implied by the requirement stated for the assay or the limit specified for the test. In tests where the limit is not numerical (for example, in comparative tests such as that for Clarity and colour of solution), the stated quantity is taken for examination. Quantities are weighed or measured with an accuracy commensurate with the indicated degree of precision. For weighings, the precision corresponds to plus or minus 5 units after the last figure stated. For example,

a value of	20 is not less than	19.5 and not greater than 20.5,
	20.0 is not less than	19.95 and not greater than 20.05,
	2.0 is not less than	1.95 and not greater than 2.05,
	0.20 is not less than	0.195 and not greater than 0.205.

(c) pH value

pH values are indicated in a manner similar to that given for quantities.

(d) Temperature measurement

Temperature measurement is indicated in a manner similar to that given for quantities.

Storage conditions given in general terms refer to the following equivalent temperatures:

in a refrigerator	2 to 8 °C
cold or cool	8 to 15 °C
room temperature	15 to 25 °C, or up to 30 °C in some climatic zones.