stoichiometric concentration, c

The stoichiometric concentration, c_B, of a component B in a system is given by the expression:

$$c_B = \frac{n_B}{V}$$

where n_B is the stoichiometric amount of substance of component B in the system and V is the volume of the system. The component added to the system may dissociate or react with other components to form a series of derived components and only a fraction of the original component may actually exist in a free form in the system. It is therefore essential to distinguish between the stoichiometric concentration and the amount-of-substance concentration of the free form of the component in the system. Sometimes stoichiometric quantities are indicated by a subscript $(_o)$, e.g. $n_{o,B}$, $c_{o,B}$. In clinical chemistry, the term stoichiometric concentration is rarely employed. Instead, the name of the component is modified to indicate inclusion of the various derived forms, e.g. mixtures of a defined chemical component and its derivatives may be denoted by the plural form of the name of the pure unchanged substance, or to indicate the sum of components specified in individual quantities the specification 'total' may be employed.

Source:
PAC, 1984, *56*, 567 *(Physicochemical quantities and units in clinical chemistry with special emphasis on activities and activity coefficients (Recommendations 1983))* on page 568