

inhibition

Also contains definition of: degree of inhibition

The decrease in rate of reaction brought about by the addition of a substance inhibitor), by virtue of its effect on the concentration of a reactant, catalyst or reaction intermediate. For example, molecular oxygen and *p*-benzoquinone can react as 'inhibitors' in many reactions involving radicals as intermediates by virtue of their ability to act as scavengers toward these radicals. If the rate of a reaction in the absence of inhibitor is v_0 and that in the presence of a certain amount of inhibitor is v , the degree of inhibition (i) is given by:

$$i = \frac{v_0 - v}{v_0}$$

See also: mechanism based inhibition

Source:

PAC, 1994, 66, 1077 (*Glossary of terms used in physical organic chemistry (IUPAC Recommendations 1994)*) on page 1125

PAC, 1996, 68, 149 (*A glossary of terms used in chemical kinetics, including reaction dynamics (IUPAC Recommendations 1996)*) on page 169

See also:

PAC, 1992, 64, 143 (*Glossary for chemists of terms used in biotechnology (IUPAC Recommendations 1992)*) on page 157

PAC, 1993, 65, 2291 (*Nomenclature of kinetic methods of analysis (IUPAC Recommendations 1993)*) on page 2295