

micellar catalysis

The acceleration of a chemical reaction in solution by the addition of a surfactant at a concentration higher than its critical micelle concentration so that the reaction can proceed in the environment of surfactant aggregates (micelles). (Rate enhancements may be due, for example, to higher concentration of the reactants in that environment, more favourable orientation and solvation of the species, or enhanced rate constants in the micellar pseudophase of the surfactant aggregate.) Micelle formation can also lead to a decreased reaction rate.

See also: catalyst

Source:

PAC, 1994, 66, 1077 (*Glossary of terms used in physical organic chemistry (IUPAC Recommendations 1994)*) on page 1140