Association phenomenon of esters in water/surfactant/co-surfactant/hydrocarbon system

ABSTRACT

The pseudoternary phase diagrams of water/sodium dodecyl suphate(SDS):hexan-1-ol(35:65)/hydrocarbon/esters were prepared. The esters used are ethyl-n-butyrate, ethyl benzoate, methyl oleate and methyl linolenate. While the hydrocarbons are n-decane and p-xylene. The solubility area of the W/O microemulsion region was found to be largest in ethyl-n-butyrate followed by ethyl benzoate, methyl oleate and methyl linolenate for all of the systems. No appreciable difference in the W/O microemulsion region was observed as the n-decane was substituted with p-xylene.

Keyword: Esters; Solubility