

Micro emulsion Formulation The properties of the surfactant–oil–water are important in determining – 4 the formation of micro emulsions. The formation of a micro emulsion depends on factors such as: (1) oil/surfactant and surfactant/co–surfactant ratio; (2) nature and concentration of the oil, surfactant, co–surfactant and aqueous phase; (3) pH; (4) temperature; and (5) hydrophilicity / lipophilicity of polarity (Bolzinger, et al., 1998; Salager, 2000).

4.1 – Formulation Considerations A micro emulsion generally consists of four different components, a lipophilic phase, a hydrophilic phase, surfactant and co–surfactant (Scriven, 1976). The quantities of different substances present, are also likely to change the properties, and are referred to as composition variables which can be expressed as weight, percentage or proportion (Salager, 2000). When four or more components are used pseudo–ternary phase diagrams are used to depict these systems in which each corner represents binary mixtures of two components .such as surfactant/co–surfactant, surfactant/water, oil/drug, and water/drug mixtures