



A Review: Microemulsions: A Potential Bioavailability Carrier

B.P.Gadave^{1*}, A.B.Velhal², V.K.Redasani³.

¹Department of Pharmaceutics,
YSPM's Yashoda Technical Campus, Faculty of Pharmacy, Wadhe, Satara 415011,
Maharashtra, INDIA.

²Assistant Professor, YSPM's Yashoda Technical Campus, Faculty of Pharmacy,
Wadhe, Satara 415011, Maharashtra, INDIA.

³Principal, YSPM's Yashoda Technical Campus, Faculty of Pharmacy, Wadhe,
Satara 415011, Maharashtra, INDIA.

Abstract : Microemulsions are dispersions of oil and water that are clear, transparent, and thermodynamically stable, that are stabilised by an interfacial surfactant coating, sometimes in combination with a co-surfactant. Because of its improved drug solubilization capability, long shelf life, ease of preparation, and better bioavailability, microemulsion formulation has recently attracted a lot of attention for the delivery of hydrophilic and lipophilic drugs as drug carriers. We have discussed the benefits, drawbacks, kinds, structures, formulations, factors affecting formulation, preparations, characterisation, and medicinal applications of microemulsions in this review. The review is structured in such a way that a beginner to the area may quickly comprehend the key points of this revolutionary delivery mechanism.

Key words : Microemulsion, Surfactant, Co-surfactant, Characterization & Evaluation of Microemulsion, Pharmaceutical applications.

B.P.Gadave et al /International Journal of PharmTech Research, 2021,14(2): 213-227.

<http://dx.doi.org/10.20902/IJPTR.2021.140218>