International Journal of ChemTech Research
CODEN (USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555
Vol.12 No.05, pp 299-321, 2019

Microsponge: An Innovative and Novel Strategy for Drug Delivery System

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Abstract : Microsponge approach has become highly competitive and rapidly evolving technology. They are porous, polymeric microsphere that can be effectively incorporated into topical drug delivery system for the purpose of retention of dosage form on skin. Microsponge systems are non-irritating, non-mutagenic, non-allergenic and non-toxic. Microsponges are generally used for oral delivery of drugs, especially for colon specific delivery and controlled release drug delivery system to improve patient compliance by providing site specific drug delivery system and prolonging dosage intervals. Microsponges are generally prepared by several methods i.e. Liquid-liquid suspension polymerization and quasi emulsion solvent diffusion method. The present review introduces Microsponge methodology along with its principle, characterization such as Particle size and its distribution, surface morphology, porosity, density, parameters and release mechanism and drugs incorporated in MDS.

Key Words : Microsponge, Microsponge Delivery System; Control release; Microsponge Preparation Methods; Drugs used in MDS.

Shailesh S. Chalikwar *et al* /International Journal of ChemTech Research, 2019,12(5): 299-321.

DOI= http://dx.doi.org/10.20902/IJCTR.2019.120529

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