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### REVIEW

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# NANOEMULSION: - A PROMISING, STABLE AND EFFECTIVE DRUG DELIVERY SYSTEM

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#### Abstract

Now a day's Nanoemulsion are highly used in the area of research because of its unique approach in drug delivery system like sustained, Target, controlled delivery systems. Nanoemulsion are the thermodynamically stable isotropic system in which two immiscible liquid (water and oil) are mixed to form a single phase by means of an appropriate surfactants. Thus the aim of this review is to discuss the advantages and disadvantages, components of Nanoemulsion, factor affecting, physicochemical characterization, techniques and method of preparation of Nanoemulsion and different application like in pharmaceutical industry as well as cosmetic industries

Keywords:- Nanoemulsion, Factor affecting, components, Technique and Method of preparation.

## INTRODUCTION

Nanoemulsion can be defined as oil-in-water (o/w) emulsions with mean droplet diameters ranging from 50 to 1000 nm. Usually, the average droplet size is between 100 and 500 nm, terms sub-micron emulsion (SME) and mini-emulsion are used as synonyms. [1]

Three types of Nanoemulsion are most likely to be formed depending on the composition:

Oil in water Nanoemulsion wherein oil droplets are dispersed in the continuous aqueous phase

Water in oil Nanoemulsion wherein water droplets are dispersed in the continuous oil phase;

**Bi-continuous Nanoemulsion** wherein microdomains of oil and water are inter-dispersed within the system. [2] Ease of preparation and scale-up, stability and increased bioavailability are features of these formulations which have attracted the attention of researchers Nanoemulsions are also referred to as miniemulsions, ultrafine emulsions and submicron emulsions. Phase be-haviour studies have shown that the size of the