

ABSTRACT

Influence of Hydrophilic and Hydrophobic Polymer Combination to Physicochemical Characteristics of Meloxicam *Patch*

In this study, matrix type transdermal *patch* containing meloxicam were prepared using three combinations of polymers of hydroxyl propyl methylcellulose (HPMC E15), sodium alginat 20 cps, and ethyl cellulose (EC N22) in the different ratios (5:5:1 and 6:4:1). All the polymers were dissolved in the suitable solvent. All the prepared formulation used solvent evaporation technique. All the formulations were prepared and subjected to physicochemical studies (organoleptic, weight variation, moisture content, flatness, surface morphology, drug content, and homogeneity). The result of physicochemical evaluation show that formula with 6:4:1 ratio of polymer have a high yield in every test of evaluation. From all of this test, the polymeric combination HPMC E15, sodium alginat and EC N22 in composition 6:4:1 is the best choice for further research.

Keyword : transdermal *patches*, meloxicam, HPMC E15, sodium alginat, EC N22, physicochemical studies, moisture content, drug content, homogeneity.