

## Microencapsulation of Phenobarbital by Ethyl Cellulose Matrix

**Authors :** S. Bouameur, S. Chirani

**Abstract :** The aim of this study was to evaluate the potential use of EthylCellulose in the preparation of microspheres as a Drug Delivery System for sustained release of phenobarbital. The microspheres were prepared by solvent evaporation technique using ethylcellulose as polymer matrix with a ratio 1:2, dichloromethane as solvent and Polyvinyl alcohol 1% as processing medium to solidify the microspheres. Size, shape, drug loading capacity and entrapment efficiency were studied.

**Keywords :** phenobarbital, microspheres, ethylcellulose, polyvinylalcohol

**Conference Title :** ICBBBE 2015 : International Conference on Biochemical, Biomolecular and Biopharmaceutical Engineering

**Conference Location :** Jeddah, Saudi Arabia

**Conference Dates :** January 26-27, 2015