

PENGARUH JUMLAH NATRIUM ALGINAT TERHADAP KARAKTERISTIK FISIK  
DAN PELEPASAN MIKROPARTIKEL KETOPROFEN-ALGINAT (menggunakan  
metode *orifice-ionic gelation* dengan modifikasi *peristaltic pump*)

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**ABSTRACT**

(Prepared By Orifice Ionic Gelation Method Using Peristaltic Pump Modification)  
The aim of this research was to examine the effect of sodium alginate concentration on physical characteristics and drug release of ketoprofen-alginate microparticle. The microparticle containing ketoprofen (KP) were prepared by orifice ionic gelation method using peristaltic pump modification. To achieve this purpose, only polymer concentration was altered while the other parameters were kept constant. Drug entrapment efficiency, size of particle, distribution of the microparticle and determination of drug content were evaluated. *In vitro* released tests were done by using dissolution media with phosphate buffer (pH 6.8). The result showed that as sodium alginate amount increased particle size became bigger with higher drug entrapment efficiency. The release profile showed that as sodium alginate amount increased, the release of drug was more delayed.

**Keywords:** Ketoprofen; Sodium Alginate; Microparticle; Orifice Ionic Gelation Method