

**STUDI KOMPARATIF KONSENTRASI *SODIUM STARCH GLYCOLATE*
TERHADAP DISINTEGRASI TABLET KITOSAN DENGAN METODE
CETAK LANGSUNG**

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ABSTRAK

Telah dilakukan penelitian untuk melakukan analisis pengaruh konsentrasi *sodium starch glycolate* sebagai disintegran pada pembuatan tablet kitosan yang dibuat secara cetak langsung dengan tiga macam konsentrasi, yaitu 2%, 4%, dan 8% terhadap karakteristik fisik tablet, terutama waktu hancur tablet. Evaluasi tablet kemudian dilakukan pada formula I, formula II, dan formula III, dan memenuhi persyaratan dalam hal keseragaman bobot, keseragaman ukuran, kekerasan, waktu hancur. Hasil uji friabilitas pada formula I dan III memenuhi persyaratan, sedangkan pada formula II tidak memenuhi persyaratan. Evaluasi waktu hancur tablet dari ketiga formula dianalisis secara statistik dengan metode *One-Way Anova*. Terdapat perbedaan yang signifikan pada hasil uji waktu hancur ketiga formula. Hasil yang didapat adalah konsentrasi *sodium starch glycolate* 4 % menghasilkan waktu hancur paling cepat.

Kata kunci : *sodium starch glycolate*, kitosan, disintegran, tablet, cetak langsung

**COMPARATIVE STUDY CONCENTRATION OF SODIUM STARCH
GLYCOLATE CHITOSAN TABLET USING DIRECT COMPRESSION**

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ABSTRACT

A Research was conducted to analyze the influence of the concentration of *sodium starch glycolate* as disintegran in chitosan tablet manufacturing by direct compression. The concentrations are 2%, 4% and 8%. Characteristics of tablets, especially disintegration time of tablets were analyzed. There were three formulas to be evaluated : formula I, II, and III. The evaluation was based on the uniformity of weight and size, hardness, disintegration time, and friability. The result of evaluation was conformed with the qualifies of characteristics tablet, except the friability of formula II. The disintegration time was analyzed statistically by *One-Way Anova*, and there are significant differences in the test result. It was concluded that 4% *sodium starch glycolate* produced the most rapid disintegration time.

Key words: *sodium starch glycolate*, chitosan, disintegran, tablets, direct compression