

BAB V

KESIMPULAN DAN SARAN

V.1. Kesimpulan

Dapat disimpulkan dari hasil percobaan yang ada, bahwa:

1. Rifampisin yang dapat masuk ke dalam MS-1 sebanyak 108 mg, sedangkan MS-2 83 mg/100 mg partikel.
2. Partikel MS-2 dapat melepaskan sebesar 18,15%, sedangkan MS-1 dapat melepaskan rifampisin sebesar 14,62%.
3. Partikel perlu diselidiki lebih lanjut untuk memastikan bahwa rifampisin dapat dilepaskan dalam waktu 24 jam.

V.2. Saran

Pada studi penelitian ini, luas permukaan dari partikel yang didapatkan masih belum sesuai karena masih adanya surfaktan di dalam pori partikel. Untuk itu waktu kalsinasi perlu diperpanjang, sehingga surfaktan yang ada pada pori akan hilang secara keseluruhan. Pada proses pengeringan hasil loading, partikel harus diletakan dalam gelas beaker dan ditutup dengan *Cling Wrap*. Hal ini untuk menghindari kotoran masuk ke dalam dan partikel yang sudah diloading terbang ke udara. Selain itu, beaker yang digunakan harus memiliki luas permukaan yang besar agar pelarut yang tersisa dapat cepat kering. Pada proses uji pelepasan rifampisin tidak dapat terlepas dari dalam pori MS secara keseluruhan. Untuk itu perlu adanya penambahan variasi seperti: suhu dan pH media larutan saat melakukan uji pelepasan, sehingga dapat membantu peningkatan kinerja nanopartikel sebagai penghantar obat. Perlu dilakukan studi lebih lanjut untuk mengetahui pelepasan rifampisin dari mesoporus silika.

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