

INTISARI

LILLO SC. 2018. FORMULASI DAN UJI STABILITAS FISIK SUSPENSII ASAM MEFENAMAT DENGAN *SUSPENDING AGENT* NATRIUM KARBOKSIMETIL SELULOSA (Na-CMC), KARYA TULIS ILMIAH, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Asam mefenamat merupakan golongan obat anti-inflamasi non steroid yang memiliki aktivitas anti-inflamasi, analgesik, antirematik dan antipiretik dengan memiliki kelarutan praktis tidak larut dalam air. Penelitian ini bertujuan untuk mengetahui bagaimana pengaruh *suspending agent* Natrium Karboksimetil Selulosa (Na-CMC) terhadap stabilitas fisik asam mefenamat dan konsentrasi Na-CMC yang paling baik sebagai *suspending agent*.

Sediaan suspensi asam mefenamat dibuat dalam empat formulasi dengan konsentrasi *suspending agent* Na-CMC berturut-turut 1, 2, 3 dan 4 adalah (0,25%); (0,5%); (0,75%); dan (1%). Suspensi yang telah dibuat kemudian di uji stabilitas fisik sediaan yang meliputi: uji organoleptis, pH, viskositas, mudah tidaknya dituang, volume sedimentasi dan redispersibilitas. Hasil pengujian masing-masing formula di analisis menggunakan uji *One Way Anova* dilanjutkan *Post Hoc Test Turkey* taraf kepercayaan 95% untuk mengetahui formula suspensi yang paling baik dan stabil selama penyimpanan.

Hasil penelitian menunjukkan bahwa konsentrasi *suspending agent* berpengaruh terhadap stabilitas fisik suspensi. Formula 3 berdasarkan hasil pengujian stabilitas fisik suspensi mempunyai stabilitas terbaik dari empat formula suspensi yang dibuat dengan konsentrasi *suspending agent* Na-CMC adalah 0,75%.

Kata kunci: Suspensi, Asammefenamat, *Suspending agent*, Na-CMC.

ABSTRACT

LILO SC. 2018. FORMULATION AND SUSPENSION OF MEFENAMIC ACID WITH A *SUSPENDING AGENT* NATRIUM CARBOXYMETHYL CELLULOSUM (Na-CMC), SCIENTIFIC PAPERS, FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY, SURAKARTA.

Mefenamic acid is the anti-inflammatory drugs nonsteroidal activity that has anti-inflammatory, analgesic, antipyretic and antirematik with having practically no solubility soluble in water. This study was aimed to find out how was the influence of suspending agent Na-CMC on the physical properties of Mefenamid Acid, as well as to find out what concentration that could provide the most excellent physical stability among four formulas.

Mefenamic acid suspension was made preparations in four different formulations. The different of the formulations was on the concentrations of Na-CMC from formula 1, 2, 3 and 4 are (0,25%); (0,5%); (0,75%); dan (1%). Suspension which has been created then done physical quality testing includes of: organoleptis, pH, viscosity, easily whether or not the cast, volume of sedimentation and redispersibility. The results of testing each formula in the analysis using One Way Anova test followed Post Hoc Turkey Tests 95% confidence levels ton find out the best suspension formula and stable during storage.

The results showed that the variation of the suspending agent affected on physical quality test suspension. Formulation 3 based on the test results of the physical quality of the suspension has the best stability of four suspension formula made with concentrations of suspending agent Sodium Karboksimetil Cellulose (Na-CMC) is 0.75%.

Keyword: Suspension, Mefenamic acid, Suspending agent, Na-CMC.