

INTISARI

Suspending agent Methocel K15M Premium EP dalam suatu sediaan suspensi digunakan untuk mempertahankan stabilitas fisiknya. Penelitian mengenai stabilitas fisik ini bertujuan untuk mengetahui pengaruh penggunaan *suspending agent* dengan melihat adanya penurunan maupun peningkatan stabilitas fisik. Penelitian yang dilakukan merupakan jenis penelitian eksperimental sederhana pola satu arah.

Penelitian mengenai stabilitas fisik suspensi yang telah dilakukan dibuat tiga macam formula. Formula I (formula standar) menggunakan *suspending agent Carboximethylcellulose Natrium* 1 %, sedangkan formula II dan III menggunakan methocel K15M Premium EP 1% dan campuran methocel K15M Premium EP – tween 80 (3:7). Pengamatan tersebut dilakukan selama 6 minggu dan setiap minggunya diamati mengenai rheogram, volume sedimentasi, redispersibilitas dan waktu penuangan.

Hasil penelitian menunjukkan rheogram ketiga formula menghasilkan sistem yang mudah mengalir untuk setiap minggunya. Data volume sedimentasi (hu/ho) menunjukkan bahwa sistem mengalami penurunan dari selesai pembuatan sampai 6 minggu penyimpanan, kecuali untuk formula II. Formula I hu/ho awal= 1 sampai minggu VI hu/ho=0,43 , dan formula III hu/ho awal=1 sampai minggu VI hu/ho =0,69, sedangkan formula II hu/ho tetap 1, dengan demikian formula II tetap terdispersi merata. Uji redispersibilitas menghasilkan data sebagai berikut : formula I 0,6 – 5,04 menit, formula II : 0,97 – 1 menit dan formula III : 0,81 – 2,14 menit. Data penuangan memberikan hasil ketiga formula termasuk sistem yang mudah dituang.

ABSTRACT

Suspending agent of Methocel K15M Premium EP used to maintain the physical stability suspensi. The research was done to know effects of the use of suspending agent with the fluctuation present in the physical stability of suspension. The experimental research of one direction pattern.

In order to compare the suspension physical stabilities, the study had been carried out. Formula I (FI) as the standard formula, was prepared used 1% Carboximethylcellulose sodium as the suspending agent while formula II (FII) and formula III (FIII) used 1% of methocel K15M Premium EP and the mixture of methocel K15M Premium EP – tween 80 (3:7), respectively. The suspension physical stabilities were observe every week for six weeks periods at the room temperature and compressed of the determination of rheology, volume sedimentation, redispersibility and time to pour.

The rheograms showed that all suspensions seemed to flow more easily week after week. The volume sedimentation data expressed as h_u/h_0 , occurred the decreasing from after preparing to six weeks period of storage, excepted for F II. F I showed from 1 to 0,43, F II seemed to be constant, and F III from 1 to 0,69 respectively. The redispersibility studies resulted in F I look 0,6 – 5,04 minutes, F II 0,97 - 1 minutes and F III 0,81 – 2,14 minutes, respectively. The study of time to pour showed that all formula were easily to pour.