

KARAKTERISASI *ORALLY DISINTEGRATING TABLET* PIROKSIKAM DENGAN
PENGIKAT GELATIN 1% DAN 2% MENGGUNAKAN SUPERDISINTEGRAN
CMC-Ca 2,5% (Dibuat Dengan Metode *Freeze Drying*)

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ABSTRACT

Piroxicam is an effective cyclo-oxygenase inhibitor with anti-inflammatory and analgesic properties. Orally disintegrating tablets of piroxicam were prepared by freeze drying method using mannitol based excipient. These tablets contains CMC-Ca 2,5% as superdisintegrant, gelatine 1% and 2% as binder. Orally disintegrating tablets were characterized by differential thermal analysis (DTA), powder x-ray diffractometry (PXRD) and scanning electron microscopy (SEM). The characteristics were compared between single compound, physical mixture and freeze dried ODT. The DTA and PXRD study indicated that compared to physical mixture there was a decrease in degree of cristalinity of piroxicam in freeze dried orally disintegrating tablets. DTA and PXRD data also demonstrated that increasing the concentration of gelatin decreased the degree of cristalinity of piroxicam in the freeze dried orally disintegrating tablets. Characterization with Scanning Electron Microscope showed that tablets made by frreeze drying was porous. Porous structure of orally disintegrating tablets causes quick penetration of saliva in the pores when placed in oral cavity lead to improve disintegration of the tablets.

Keywords: *Characterization, Orally Disintegrating Tablets, Piroxicam, CMC-Ca, Gelatine.*