## ADLN - PERPUSTAKAAN UNIVERSITAS AIRLANGGA

## **ABSTRACT**

## EFFECT OF POLYPLASDONE XL-10 CONCENTRATION IN COPROCESSED EXCIPIENTS MANNITOL — POLYPLASDONE XL-10 — GELATIN ON THE PHYSICAL QUALITY AND DISSOLUTION OF PARACETAMOL ORALLY DISINTEGRATING TABLET

(Prepared Using Direct Compression Method)

## Sukmaning Ayunda

The aim of this study was to determine the effect of Polyplasdone XL 10 5% and 10% as a superdisintegran in coprocessed excipients mannitol – Polyplasdone XL-10 – gelatin 2% on the physical quality (thickness, hardness, friability, disintegration time, wetting time) and dissolution of paracetamol ODT made by direct compression. Tablets were made to contain 120 mg paracetamol/tablet and pressed by hydraulic press for 1 ton. Tablets were evaluated for thickness, hardness, friability, disintegration time, wetting time and dissolution. The results showed that mechanical strength of the tablet containing Polyplasdone XL 10 10% in coprocessed excipients was better than the tablet containing Polyplasdone XL 10 5% in coprocessed excipients, but there was no difference in thickness. The friability of both formula were less than 1%, disintegration time were less than 60 seconds, and percent dissolved within 30 minutes were more than 80%.

Keywords: Orally Disintegrating Tablet, Paracetamol, Coprocessed excipients, Direct compression, Polyplasdone XL-10

xii