

HYDROLYSIS

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SKRIPSI

ETIK WAHYUNINGSIH

**PERBANDINGAN PENGARUH PELARUT
ETANOL DAN ASETON TERHADAP PERSENTASE
HASIL ASAM *o*-METOKSIBENZOAT PADA REAKSI
HIDROLISIS METIL *o*-METOKSIBENZOAT
DALAM SUASANA ASAM**

**MILIK
PERPUSTAKAAN
UNIVERSITAS AIRLANGGA
SURABAYA**



**FAKULTAS FARMASI UNIVERSITAS AIRLANGGA
BAGIAN KIMIA FARMASI
SURABAYA
2004**

Lembar Pengesahan

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DIBUAT UNTUK MEMENUHI SYARAT MENCAPAI GELAR SARJANA
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ABSTRACT

Hydrolysis of methyl *o*-methoxybenzoate catalyzed by HCl has been done in two different solvents that are ethanol and acetone. Identification of the resulted compound was done by TLC test, melting point test, FT-IR spectrophotometry, ¹H-NMR spectrometry and Mass spectrometry. Identification showed that the resulted compound was *o*-methoxybenzoic acid.

The yield of both solvent were shown as 59% in acetone and 34% in ethanol, using statistical methods showed that there was significant difference in the yield of both solvent and the highest yield was given by acetone. These solvent effects may be explained by the solvent ability in carbonium solvation. In ethanol, the rate of methyl *o*-methoxybenzoate hydrolysis decreased because of decreased ability in carbonium solvation, while in the presence of acetone, the solvent ability in carbanion solvation increased by the formation of dipole bonding between the solvent and the ester.

Keywords: Methyl *o*-methoxybenzoate, hydrolysis, ethanol, acetone and *o*-methoxybenzoic acid.