

- ULTRAVIOLET SPECTROMETRI

# SKRIPSI

TRIANA SETIAWATI

STUDI KINETIKA PERURAIAN  
N-3,4-DIKLOROBENZOILSEFALEKSIN OLEH PENGARUH pH  
DITETAPKAN SECARA SPEKTROFOTOMETRI ULTRA VIOLET

FF 08/06  
Set  
S



FAKULTAS FARMASI UNIVERSITAS AIRLANGGA  
BAGIAN KIMIA FARMASI  
SURABAYA  
2005



**Lembar Pengesahan**

**STUDI KINETIKA PERURAIAN  
N-3,4-DIKLOROBENZOILSEFALEKSIN OLEH PENGARUH pH  
DITETAPKAN SECARA SPEKTROFOTOMETRI ULTRA VIOLET**

**SKRIPSI**

Dibuat untuk memenuhi syarat mencapai gelar Sarjana Farmasi  
pada Fakultas Farmasi Universitas Airlangga  
.2005

Oleh :

**Triana Setiawati**  
**NIM. 050012291**

Disetujui oleh :

Pembimbing Utama



Dra. Nuzul Wahyuning Diah, M.Si, Apt.  
NIP. 132 011 698

Pembimbing Serta I

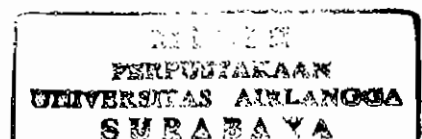


Drs. Bambang Tri Purwanto, MS, Apt.  
NIP. 131 470 996

Pembimbing Serta II



Prof. Dr. H. Purwanto, Apt.  
NIP. 130 541 900



## ABSTRACT

### **Study of Degradation Kinetics of N-3,4-Dichlorobenzoylcephalexin by pH Influence Using Ultraviolet Spectrophotometric Method**

This research is to determine the stability of N-3,4-dichlorobenzoylcephalexin using degradation kinetics principle by measuring parameters reaction rate constants ( $k$ ) and half life ( $t_{1/2}$ ). The degradation kinetics of N-3,4-dichlorobenzoylcephalexin was studied using various pH at temperature  $50^{\circ}\text{C}$  for 3 hours. The intact compound was analyzed using spectrophotometric method based on UV absorption of  $\text{O}=\text{C}-\text{N}-\text{C}=\text{C}$  linkage. The results showed that degradation kinetics N-3,4-dichlorobenzoylcephalexin are influenced the pH of the solution. The higher pH of the solution, the higher  $k$  value and the lower  $t_{1/2}$  value of N-3,4-dichlorobenzoylcephalexin. It is suggested to store ~~solution~~ N-3,4-dichlorobenzoylcephalexin in acid condition and also suggested to study N-3,4-dichlorobenzoylcephalexin's degradation kinetics in various temperature.

**Keyword :** N-3,4-dichlorobenzoylcephalexin, degradation kinetics, ultraviolet spectrophotometric method