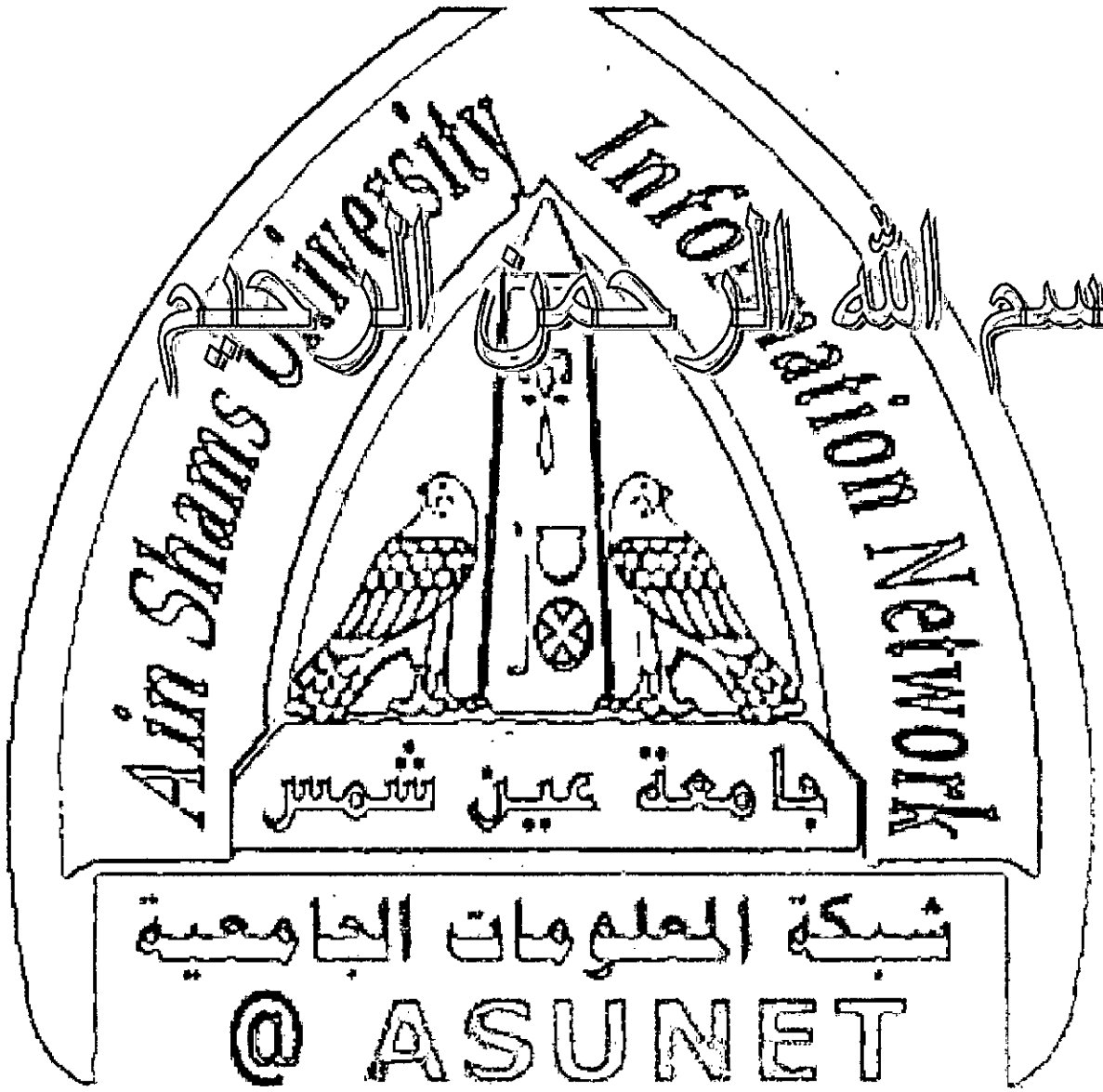
شبكة المعلومات الجامعية



شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد أعدت دون أية تغيرات

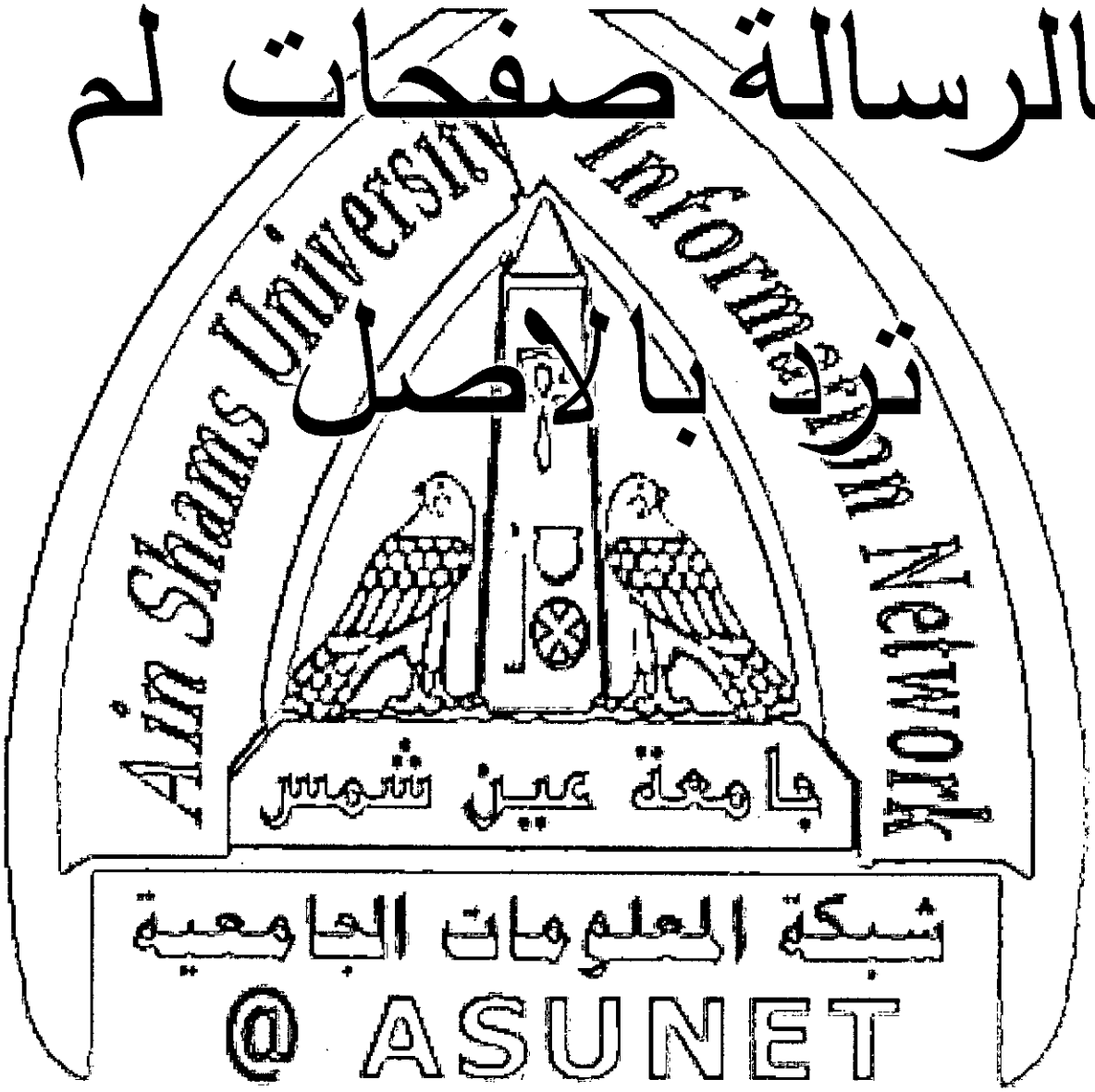
يجب أن

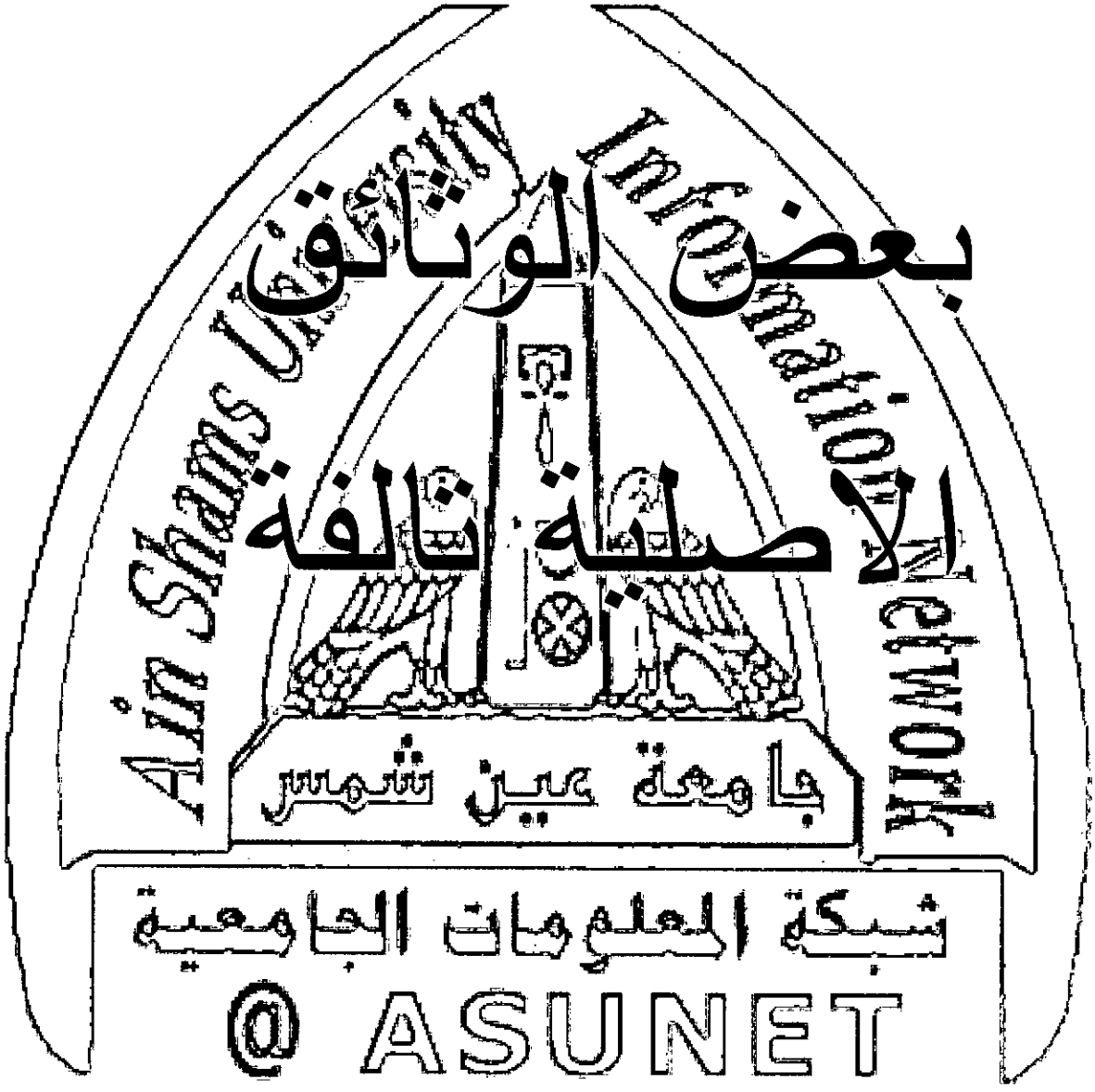
تحفظ هذه الأفلام بعيدا عن الغبار

في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

To be Kept away from Dust in Dry Cool place of 15-25- c and relative humidity 20-40%

بالرسالة صفحات لم تردبالاصل





بعض الوثائق الأصلية تالفة

660

THERMAL STABILIZATION OF POLYVINYL CHLORIDE USING ALUMINA

BY
Marwa Mostafa Yousef
B.Sc.Chem.Eng.

A Thesis submitted to the
Faculty of Engineering- at Cairo University
In Partial Fulfillment of The requirements for degree of
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In
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Faculty of Engineering, Cairo University

Giza, Egypt

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GP YNCE

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Under supervision of

Prof. Dr. Magdi F. Abadir

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Approved by the
Examining committee:

Prof. Dr. Magdi F. Abadir	Professor Of Chemical Engineering , Cairo University	Main advisor
Prof. Dr. El Sayed Abdel Maguid Sherif	Professor Of Chemical Engineering , Cairo University	Member
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ABSTRACT

PVC has been widely used for various purposes because of its low price, good durability, availability and ease of processing; PVC is virtually never used alone, but always in combination with other materials. many of its advantages are enhanced by incorporation of small solid particles as reinforcingagent,stabilizer,plasticizer,pigments or other additives.

The thermal degradation of a type of PVC was investigated. Complex processes for PVC degradation were evidenced. The kinetic analysis of dehydrochlorination and subsequent process was investigated by thermogravimetric (TG) analysis,and derivative thermogravimetry (DTG) at different temperatures. The values of non-isothermal kinetic parameters were determined by Sabri et al method. Isothermal kinetics were also studied.

Aluminum oxide was used as astabilizer in different ratios. It was added to PVC in the following percentage 33.3% , 25% , 20% , 16.7%.

The effect of these different ratios on the thermal properties of the polymer was studied to determine the optimum amount which can be used as a thermal stabilizer.

ACKNOWLEDGMENT

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