Controlled Nitration of Aniline

A PROJECT REPORT SUBMITTED IN PARTIAL FULFILLMENT

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By

ANKUR SIDDHPURA

Enrollment No. 181127205038

Under the guidance of

Dr. TIRTH THAKER

DEPARTMENT OF CHEMISTRY

PARUL INSTITUTE OF APPLIED SCIENCE

LIMDA-391760, VADODARA, GUJARAT, INDIA

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1. :Abstract:

Nitration of aniline is well known process in which m-Nitro & p-Nitro aniline are synthesized almost in equivalent portion with minute portion of o-Nitro aniline also. We have developed process to produce m-Nitro aniline in more than 90% yield & achieved to control the formation of p-nitroaniline. In this process o-Nitro aniline is not forming at all. This process is possible by keeping low temperature through out the process and shortening the time of process. The product m-Nitroaniline (95% isolated) doing column chromatography along with only p-Nitroaniline (only 2-3% isolated). o-Isomer is found nil in the process.

This is the confirmation about the process by doing yield analyses & process through out monitored on TLC (Chloroform:Ethyl acetate: 9:1).

2. Objective: To invent a new process for controlled nitration to enhance m-Nitro aniline isomer.