

INTRODUCTION

The mono-nitration of toluene by mixed acid results in the formation of a mixture of three monomers, viz. para, meta, ortho-mononitrotoluenes, in the proportions depending on reaction conditions.

Mononitrotoluenes are used in the synthesis of intermediates for azo dyes, rubber chemicals, agricultural chemicals and explosives.

p-Mononitotoluene is an important intermediate in dye stuffs and pharmaceuticals manufacture and hence is generally in the greatest demand of the three isomers. Effort has been focused on increasing the amount of p-isomer that is formed in the mononitration of toluene.

This is a report on the design of a plant for the manufacture of 25 tons of mononitrotoluenes per day.