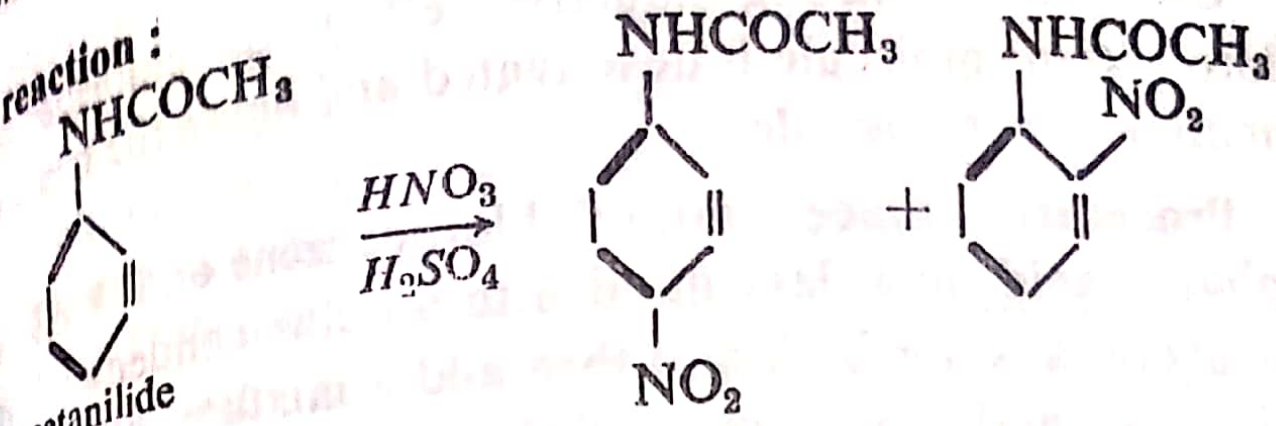
M.P. 90°C

Exercise No. 20. To prepare *p*-nitroacetanilide from acetanilide.

Requirements :	Acetanilide	10 gm.
	Glacial acetic acid	10 ml.
	Fuming nitric acid	4 ml.
	Conc. sulphuric acid	20 ml.
	Freezing-mixture bath	

...parations

...mical reaction :



Procedure : Take 10 gm. of powdered acetanilide and 10 ml. ...f glacial acetic acid in a 200 ml. beaker. Stir or warm the ...ntents to obtain a clear solution and add 20 c.c. of conc. sulphu... ...c acid portionwise with stirring. Now place the reaction mixture ...a freezing mixture bath (ice+salt) to have temperature in the ...inity of 0 to 5°C and add 4 ml. of the fuming* nitric acid drop... ...ise and with constant stirring. Remove the beaker from the freez... ...g mixture bath, allow it to stand at room temperature for half an ...ur. Pour the contents to 100 gms. of crushed ice (or into 200 ml. ...f cold water) and allow the product to stand for 15 minutes. Filter ...e *p*-nitroacetanilide at the pump, wash the product with a cold ...ter and *recrystallise* the product from *alcohol or methylated spirit* ...en the *o*-isomer being soluble goes to the filtrate.

Appearance	Colourless crystals
Yield	8 gm.
M.P.	214°C