Answer on Question #54920 - Chemistry - Other

Question:

Benzenediazonium chloride and aq. sodium chloride is produced from a reaction of aniline (i.e. phenylamine or aminobenzene) and nitrous acid (produced in situ from 2 mol Hydrochloric acid and sodium nitrate). In the second step, phenol is coupled (at the para position) to the diazonium salt with the loss of hydrochloric acid, to form a yellow- orange azo dye. draw a reaction scheme.

Answer:

1.
$$HCI, NaNO_2$$
 $HCI, NaNO_2$
 $HCI, NaNO_2$

2.
$$\bigoplus_{N=-N}^{\bigoplus} N \stackrel{\Theta}{\subset} I$$

 NH_2