

B.Sc. Part III (Hons.)

Paper - VII

Organic Chemistry

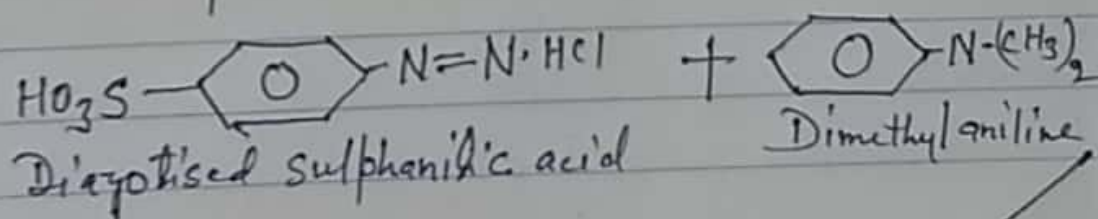
Topic: Dyes:

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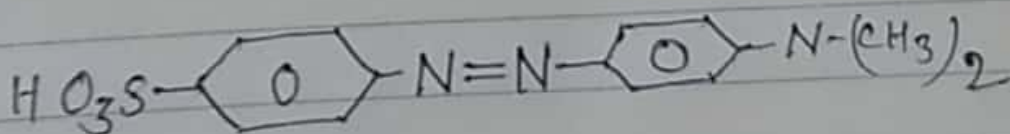
Write short notes on: Azo dyes.

Ans: Azo dyes are characterised by the presence of azo group ( $-N=N-$ ) in their structures. These are prepared by coupling benzene diazonium salts with phenols or aromatic amino compounds. Methyl orange, congo red, para red, etc. are important azo dyes.

1. Methyl orange: It is prepared by coupling diazotised sulphaniline with dimethyl aniline.

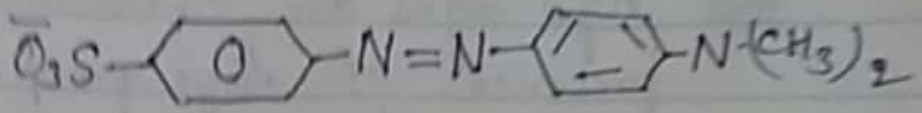


$\swarrow -\text{HCl}$

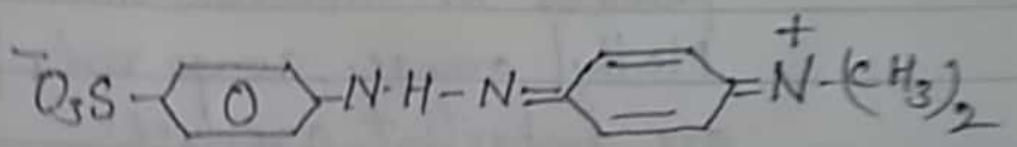


Methyl Orange.

It dyes wool and silk and gives Orange colour. But colour is not fast. It is an important acid-base indicator. It shows yellow colour with alkali and red with acid.



Yellow (benzenoid structure)



Red (quinonoid structure)

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