

Summary

Metronidazole benzoate is a photoliable drug. It should, therefore, be protected from light especially when formulated in suspension forms (40mg/ml).

It is recommended here to keep the suspension protected by bottling it in an amber or dark brown glass bottle. The study has shown that TLC can be used for the detection of Metronidazole benzoate and its decomposition products.

Spectrophotometric methods of analysis are not quite ideal for detection of photocomposition products of Metronidazole benzoate however; the method is useful for the determination of the level of active ingredient of the drug.

Modern infrared spectroscopy was proved to be effective in qualitative study and determination of the molecular changes that occur in Metronidazole benzoate molecule.

High performance liquid chromatography (HPLC) was found to be a suitable method to study the stability of Metronidazole benzoate, as it enables detection of any degree of degradation in the drug as well as it provides a mean for following the decomposition rate and determining the level of active ingredient in the drug.