

## SPECTROSCOPIC STUDY OF COMPLEXES OF A-CYCLODEXTRIN WITH THIABENDAZOLE

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Cyclodextrins are cyclic oligosaccharides shaped like a hollow truncated cone containing 6 ( $\alpha$ -CD), 7 ( $\beta$ -CD), or 8 ( $\gamma$ -CD)  $\alpha$ -1,4-glucopyranose units with a relatively hydrophobic central cavity and hydrophilic entrances. That enable them to form monomolecular inclusion complexes with various organic and inorganic guest entities in different solvents. Molecular complexation with cyclodextrin (CD) has been generally accepted more efficient method to improve solubility poorly soluble drugs or pesticides.

Thiabendazole (2-(4-Thiazolyl)-1 H-benzimidazole) (TBZ) is a broad spectrum systemic fungicide used for controlling some plagues, e.g. mold, rot, blight and stain in all kinds of crops, especially fruit and vegetables, both pre and post – harvesting.

The inclusion complex of thiabendazole with  $\alpha$ -CD is defined by UV-VIS spectroscopy (Specord 50). This study indicates that the concentration of thiabendazole in aqueous solution of  $\alpha$ -cyclodextrin is increasing 4 times.

## INTERACTION BETWEEN PPI G4 DENDRIMER AND 5-FLUOROURACIL IN AQUEOUS SOLUTION

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Poly(propylene imine) dendrimers (PPI) are polymeric macromolecules that can find their use as carriers oncologic drugs, among others 5- fluorouracil. The surface groups of PPI dendrimers belonging to the fourth (G4) and fifth (G5) generation allow ligand molecules to bind both with