



## Influence of the Addition of Alpha or Gamma-Cyclodextrin on the Formation of Free Films in the Polymethacrylates Eudragit® FS30D

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**SUMMARY.** Free films were obtained by the combination of a polymer Eudragit™ FS30D and oligosaccharides (alpha or gamma-CDs), by a casting process. The films were characterized by DSC, TGA, FTIR and SEM. The influence of composition was available by WVT and swelling measurements experiments. The DSC, TGA and FTIR characterized the films as immiscible in all composition studied. The results have shown that the addition of oligosaccharide to Eudragit™ FS30D promoted changes to both the water vapour permeability and hydration properties of the films. The changes were shown to be dependent on the increase in the concentration oligosaccharides added to the free film. The films Eudragit™ FS30D and oligosaccharides alpha or gamma-CDs obtained are regarded as being suitable for preventing the premature release of drugs in the upper part of the gastrointestinal tracts and present great interest in the application as biodegradable carriers for modified oral drug delivery systems.

**KEY WORDS:** Acrylic polymer, Alpha-cyclodextrin, Biodegradable carriers, Gamma-CDs cyclodextrin, Free film.

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