

RELEASE KINETICS OF THEOPHYLLINE MICROPARTICLES IN HYDROGENATED PALM OIL FROM A PGSS PROCESS

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Micrometric particles of Hydrogenated Palm Oil (HPO) and theophylline were obtained by a PGSSTM process using supercritical carbon dioxide at different expansion pressures.

Pressure had some effect in particles morphology and size distribution. Sauter diameter revealed to be determining of the theophylline release from the HPO matrix. A model, based in simple diffusion, was developed for the HPO/theophylline microparticles produced using this technique.