Vibrational Spectroscopic Study of Fluticasone Propionate


Abstract:

Fluticasone propionate is a synthetic glucocorticoid with potent anti-inflammatory activity that has been used effectively in the treatment of chronic asthma. The present work reports a vibrational spectroscopic study of fluticasone propionate and gives proposed molecular assignments on the basis of ab initio calculations using BLYP density functional theory with a 6-31G* basis set and vibrational frequencies predicted within the quasi-harmonic approximation. Several spectral features and band intensities are explained. This study generated a library of information that can be employed to aid the process monitoring of fluticasone propionate.

Published In: