



## Monotropically More Stable Fenopropfen Calcium Dihydrate

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Accepted on 24<sup>th</sup> April 2015

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### ABSTRACT

*Fenopropfen calcium (FC) dihydrate is a non-steroidal anti-inflammatory drug. FC dihydrate is marketed with the name Nalfon. FC dihydrate is presently available only in tablet form with high oral dosages of 200 mg, 300 mg, 400 mg and 600 mg. A monotropically more stable, novel crystal form (Form II) of FC dihydrate with no change in aqueous solubility has been identified and fully characterized by a variety of analytical techniques such as Polarized Microscopy (PM), Powder X-Ray Diffraction (PXRD), Differential Scanning Calorimeter (DSC), Thermo Gravimetric Analysis (TGA), Karl Fischer Titration (KFT) and Infrared Spectroscopy (FT-IR) techniques. Aqueous solubility is measured by using High Performance Liquid Chromatography (HPLC). Form II is obtained from less toxic and environment friendly class III organic solvent ethylacetate.*

**Keywords:** Fenopropfen calcium dihydrate, Anti-inflammatory, XPRD, Aqueous solubility.

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