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Characterization of Naphthoquinonic Derivative with Leishmanicide Activity by Thermal Analysis, Intrinsic Dissolution and Liquid Chromatography

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SUMMARY. New derived naphthoquinonic molecules with leishmanicidal activity (HBL) were characterized by thermoanalytical techniques, intrinsic dissolution and high performance liquid chromatography. The thermogravimetry (TG) and differencial scanning calorimetry (DSC) thermal behavior data showed differences among the samples, allowing to sort homo-β-laphachone naphthoquinone derivative batches into three groups with physical and thermal stability similar qualities. The chromatographic data and intrinsic dissolution evidenced the presence of naphthoquinonic derived groups with distinct features of morphology, solubility and purity. Analytical techniques correlation employed in this study showed parameters of physical properties of HBL batches essentials in differentiation of the quality and evaluation of uniformity of stand batches and it exposed to be necessary better control in synthesis methodology of HBL.

KEY WORDS: Chromatography, Intrinsic dissolution, Naphthoquinone derivatives, Physical quality, Thermal analysis.

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