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**A feasible method for indirect quantification of L-T₄ in drugs by iodine
determination**

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ABSTRACT

In this work, a method combining microwave-induced combustion (MIC) for sample preparation of commercial levothyroxine sodium (L-T₄) drugs (L-T₄: 25 - 200 µg/tablet), and potentiometry with ion selective electrode (ISE) for iodine determination and subsequent indirect quantification of L-T₄ was proposed. The type and concentration of the absorbing solution were evaluated to select the most suitable conditions for this study. Using the MIC method, it was possible to use solutions as diluted as 150 mmol L⁻¹ (NH₄)₂CO₃ (for samples containing 25 - 200 µg of L-T₄/tablet) for I absorption. In these conditions, recoveries for L-T₄ were between 99 and 101%,

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