ANALISIS KADAR NATRIUM BENZOAT PADA SAOS TOMAT DI PASAR PARE KABUPATEN KEDIRI DENGAN SPEKTROFOTOMETRI UV-VIS

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ABSTRACT

Background: *This study aims to determine the concentration of sodium benzoate in tomato sauce products sold at Pare Market, Kediri Regency. Sodium benzoate is a food additive (preservative) that must be used within the maximum limit set by the Indonesian Food and Drug Authority (BPOM), which is 1000 mg/kg. The analytical method used in this study is UV-Visible spectrophotometry due to its accuracy, speed, and ease of use. Tomato sauce samples were extracted using chloroform after treatment with saturated NaCl solution and 10% NaOH. The chloroform extract was then evaporated and redissolved in ethanol p.a. The absorbance of the resulting solution was measured at a maximum wavelength of 240 nm. The sodium benzoate concentrations in each sample were determined using a calibration curve derived from standard solutions. The results showed that the sodium benzoate content in the eight tested samples ranged from 42.2 mg/kg to 518.93 mg/kg. All samples contained sodium benzoate levels below the maximum allowable limit set by BPOM, indicating that the analyzed tomato sauce products are safe for consumption.*

Keywords: *Sodium benzoate, tomato sauce, UV-Vis spectrophotometry, food additive, BPOM.*