

NICOTINE LEVELS ANALYSIS OF TOBACCO THE EXCISE CIGARETTE AND CIGARETTE NON EXCISE USING HIGH PERFORMANCE LIQUID CHROMATOGRAPHY

ABSTRACT

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Nicotine is the main part of cigarettes, and analitically the most dangerous part, so that must be analyzed its percentage on it. Branded cigaretes and non branded cigaretes is used in this test. High performance liquid chromatography method is also choosen to recalculated nicotine level in cigarettes. Nicotine are extracted from the cigarettes using maseration proces. The result show that nicotine level from branded cigarettes are 1.46 mg/stick and 0.89 mg/stick for cigarettes non branded. This results still meets with Indonesian regulation that decides nicotine maximal level for cigarettes is 1.5mg/stick. Verification process of the test is done by determined its accuracy, precision, detection and quantitative limit. The verification results show that its accuracy value is 97.59%, precision value is 1.7%, detection limit is 4.644 ppm, and quantitative limit is 15.483 ppm.

Keywords: Nicotine, cigarette banded and not banded excise duty, high performance liquid chromatography.