

[CBM 78] New methodology for the analysis of volatile organic compounds (VOCs) in bioethanol by GC-MS

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Palavras-Chave: Bioethanol; Gas chromatography; Validation of method.

Resumo: The present study presents a new analytical methodology for the determination of 11 compounds present in ethanol samples through the gas chromatography coupled to mass spectrometry (GC-MS) technique using a medium polarity chromatography column composed of 6% cyanopropyl-phenyl And 94% dimethyl polysiloxane. The validation parameters were determined according to NBR ISO 17025:2005. The recovery rates of the studied compounds were 100.4% to 114.7%. The limits of quantification are between 2.4 mg.kg^{-1} and 5.8 mg.kg^{-1} . The uncertainty of the measurement was estimate in circa of 2%.