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Aqueous standard solutions of ethanol for calibration of breath simulators made by gravimetric preparation

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[aqueous standard breath analyzers ethanol mass concentration](#)

Abstract

Breath analyzers are instruments for determination of alcohol (ethanol) mass concentration in exhaled air. These instruments are calibrated in Poland by means of wet gas standards produced „in situ” from aqueous standard solutions in breath simulators. The paper presents a procedure developed at GUM for the gravimetric preparation of liquid ethanol standards along with a detailed analysis of the potential sources of uncertainty of assigned ethanol content.

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