

Ensuring the validity of the results of the national standard of the volume measurement unit by participating in the international comparison within EURAMET

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Abstract

In order to declare the National Standard of the volume measurement unit within the National Institute of Metrology, measurements were carried out for a period of time to demonstrate the stability of the metrological characteristics of the measuring instruments that are part of the standard. Following the results that demonstrated the stability of the metrological characteristics in various environmental conditions and giving the beneficiaries confidence in the measurements made, it was decided to participate in the international comparison within EURAMET, project 1479. This article describes how the measurements took place via itinerant standard, the calibration methods used and describes the results obtained by the National Metrology Institute of the Republic of Moldova and other participating states. At the same time, the given article proves the confidence in the quality of measurements from the Republic of Moldova in the field of volumes. After analyzing the statistical data, the congruence of the evaluation factors and their comparison with 10 other countries, we can say with certainty that a liter measured in Moldova is the same liter as in Prague, Paris, Lisbon, etc.

Keywords: *itinerant means, liquid volume measurement, standard, uncertainty*

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