

Conformity assessment standards

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The conformity of a product is assessed before it is placed on the market, to demonstrate that all legislative requirements are met. Conformity assessment includes testing, inspection and certification. The procedure for each product is specified in the applicable product legislation.

International standards in the field of conformity assessment are developed by ISO/CASCO – Committee on Conformity Assessment, which includes 104 participating members (standard institutions representing their countries) and 35 observing members. ISO/CASCO published 31 documents (guides and standards), 6 are under development.

The most relevant standards for a chemical analytical laboratory, which will be discussed in the lecture, are:

ISO/IEC 17000:2004. Conformity assessment - Vocabulary and general principles;

ISO/IEC 17025:2017. General requirements for the competence of testing and calibration laboratories;

ISO 17034:2016. General requirements for the competence of reference material producers (developed by ISO/CASCO and ISO/REMCO together); and

ISO/IEC 17043:2010. Conformity assessment - General requirements for proficiency testing.

There are also guidelines on decision making in conformity assessment taking into account measurement uncertainty (JCGM 106, Eurachem/CITAC and others), important in the field.