

IUPAC/CITAC Guide: Investigating Out-of-Specification Test Results of Chemical Composition Based on Metrological Concepts (IUPAC Technical Report)

Ilya Kuselman et al.

Pure and Applied Chemistry, 2012
Vol. 84, No. 9, pp. 1939–1971

A metrological background for investigating out-of-specification (OOS) test results of chemical composition is discussed. When an OOS test result is identified, it is important to determine its root causes and to avoid reoccurrence of such results. An investigation of the causes based on metrological concepts is proposed. It includes assessment of validation data of the measurement process and its metrological traceability chains, evaluation of measurement uncertainty, and related producer's and consumer's risks. This approach allows distinguishing between OOS test results that indicate an actual change in chemical composition of an analyzed object, and OOS test results that are metrologically related with a certain confidence probability. Practical examples illustrating applications of the described approach in environmental and food analysis, as well in drug analysis and stability study of drug products, are described. Acceptance limits, warning and action lines for the test results, and corresponding producer's and consumer's risks are discussed.

 <http://dx.doi.org/10.1351/PAC-REP-11-10-04>

A Brief Guide to Polymer Nomenclature

R. C. Hiorns, et al

Pure and Applied Chemistry, 2012
Vol. 84, No. 10, pp. 2167–2169

The “Brief Guide” gives a simple résumé of polymer nomenclature. It was prepared with the objective of disseminating throughout the international polymer community a short, easily assimilated, guide to the essentials of polymer nomenclature.

The two-page document is targeted at authors publishing in polymer-science journals, lecturers, students, indeed anyone who would like to know how

polymers are named in accordance with IUPAC recommendations.

The “Brief Guide” includes:

1. important terminology for polymer nomenclature;
2. concise explanations of source-based and structure-based nomenclature; and
3. hyperlinks to relevant primary publications.

Download from a pdf from *PAC* or for a quick printed version see the tear-off page of this issue.

 <http://dx.doi.org/10.1351/PAC-REP-12-03-05>

IUPAC-NIST Solubility Data Series—Recent Volumes

Volume 91. Phenols with Water.

Part 1. C₆ and C₇ Phenols with Water and Heavy Water
J. Phys. Chem. Ref. Data 40, 033102 (2011)
Part 2. C₈ to C₁₅ Alkane Phenols with Water
J. Phys. Chem. Ref. Data 40, 033103 (2011)

Volume 92. Metal Carbonates.

Part 1. Solubility and Related Thermodynamic Quantities of Cadmium(II) Carbonate in Aqueous Systems
J. Phys. Chem. Ref. Data 40, 043104 (2011)

Volume 93. Potassium Sulfate in Water

J. Phys. Chem. Ref. Data 41, 013103 (2012)

Volume 94. Rare Earth Metal Iodides and Bromides in Water and Aqueous Systems.

Part 1. Iodides
J. Phys. Chem. Ref. Data 41, 013104 (2012)

Volume 95. Alkaline Earth Carbonates in Aqueous Systems

Part 1. Introduction, Be and Mg
J. Phys. Chem. Ref. Data 41, 013105 (2012)
Part 2. Ca
J. Phys. Chem. Ref. Data 41, 023105 (2012)

All SDS volumes since Volume 66 (and published in *J. Phys. Chem. Ref. Data* since 1998) are available at <http://jpcrd.aip.org>; keyword search “IUPAC-NIST Solubility Data Series”



See back cover tear-off.