

# Metrohm presents accurate method for determination of metal-organic compounds by thermometric titration

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Metrohm is pleased to present a fast and highly accurate method for the determination of metal-organic compounds by thermometric titration. The main advantage of this method is its versatile use for different metal-organic compounds.



Metal-organic compounds are commonly used in organic chemistry, for example as Grignard reagents or as strong bases (e.g., butyl lithium compounds). The knowledge of the exact content of reactive species allows to better plan the required amounts for reactions preventing the waste of material or too low yields.

The strongly exothermic nature of the reaction between 2-butanol with metal-organic compounds enables a fast and quantitative analysis of these substances (see AN-H-142). Due to the reactive nature of these samples the titrations have to be carried out under protective gas.

Thermometric titration is viable alternative to potentiometric titration. It is faster (less than 3 minutes), no maintenance of the sensor is required, and one and the same sensor can be used for all titrations (acid/base, redox, EDTA, precipitation, non-aqueous). Moreover, the sensor does not have to be calibrated and it is insensitive to aggressive media.

Source:

<https://www.metrohm.com/en/company/news/news-metal-organic-compounds-thermometric-titration/>