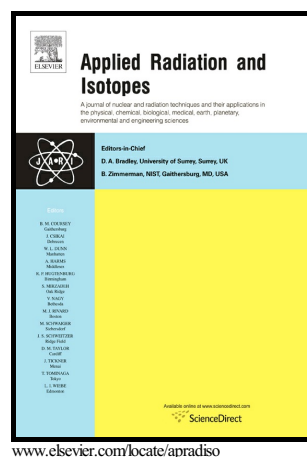


PREPARATION METHOD AND QUALITY CONTROL OF MULTIGAMMA VOLUME SOURCES WITH DIFFERENT MATRICES

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## PREPARATION METHOD AND QUALITY CONTROL OF MULTIGAMMA

## VOLUME SOURCES WITH DIFFERENT MATRICES

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### Abstract

The aim of the work was to develop new radioactive standard sources based on epoxy resins. The optimal proportions of the components and the homogeneity of the matrices were determined. The activity of multigamma sources prepared in Marinelli beakers was determined with reference to the National Standard of Radionuclides Activity in Poland. The difference of radionuclides activity values determined using calibrated gamma spectrometer and the activity of standard solutions used are in most cases significantly lower than measurement uncertainty limits. Sources production method and quality control procedure have been developed.

### Keywords

radioactive standard sources, epoxy resin, gamma spectrometry, Marinelli beakers

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