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Receptor properties of 2,2'-thiobis[4-tert-butylphenol] – acyclic analogue of tert-butylthiacalix[4] arene toward vaporous organic substances

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Abstract

In this paper, the receptor properties of 2,2'-thiobis[4-tert-butylphenol] toward vaporous organic substances were studied using quartz crystal microbalance sensors (QCM-analysis). Compositions and thermal stability parameters of 2,2'-thiobis[4-tertbutylphenol] clathrates were determined by combined thermogravimetry and differential scanning calorimetry with mass-spectrometric detection of gaseous products of decomposition (TG/DSC/MS analysis). Obtained data were compared with the similar data for *tert*-butylthiacalix[4]arene.