

Unexpected isomerization of oxetane-carboxylic acids

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Introduction and Aim

During the past decade, oxetanes have been playing an important role in chemistry as bioactive compounds and valuable starting materials in synthesis. Oxetane-carboxylic acids have been used in more than 200 patents.¹ We unexpectedly discovered that many of these molecules were unstable. Some of them isomerized into lactones under simple storage at room temperature, others - under slight heating. Chemists should keep in mind the high instability of these molecules, as this could dramatically affect the reaction yields and lead to negative results (especially in those reactions that require heating).^{2,3} Here, we want to disclose this previously unknown phenomenon in the literature.



Synthesis



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