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Title: DEVELOPMENT AND VALIDATION OF A HS/GC-MS METHOD FOR THE SIMULTANEOUS ANALYSIS OF DIACETYL AND ACETYLPROPIONYL IN ELECTRONIC CIGARETTE REFILLS

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## ACCEPTED MANUSCRIPT

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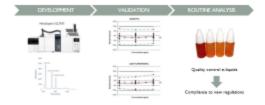
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#### Graphical abstract



### **Highlights**

- A HS/GC-MS method for diacetyl and acetylpropionyl in e-liquids was developed.
- The proposed method uses no prior derivatization.
- The method was successfully validated using accuracy profiles.
- Method is suitable for routine quality control analyses.

The use of e-cigarettes as alternative for tobacco cigarettes has become increasingly popular, even though their safety has not yet been scientifically established. One of the frequently raised concerns is the potential toxicity of certain flavours present in the e-liquids, such as diacetyl and acetylpropionyl. It is

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