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Abstract No. 69

PaperTitle **Chemical Behaviour of 2,5-Dimethyl-4-Hydroxy-3(2H)-Furanone**

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**ABSTRACT**

2,5-Dimethyl-4-hydroxy-3(2H)-Furanone (DHF), also known as strawberry furanone and Furaneol (TM), is an extremely important raw material in the flavour industry. It is the principle ingredient in many meat flavours and is also used in strawberry, pineapple and several other confectionery flavours. We have found this material to be unstable in solution, reacting to form unidentified by-products. □

This investigation was undertaken with the aim of determining the structures of these by-products, the mechanism of their formation and possible implications for manufacturing protocols. □ □

Gas Chromatography Mass Spectrometry was used to determine that the unidentified by-products were adducts formed by reaction of DHF and the solvent in which it is diluted. Details of structure elucidation and hypotheses relating to their formation will be discussed.