

食品安全检测

解吸附-电喷雾离子化质谱方法快速检测啤酒中的甲基乙二醛

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摘要

关键词

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Rapid Determination of Methylglyoxal in Beers by Desorption Electrospray Ionization Mass Spectrometry

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Abstract A desorption electrospray ionization mass spectrometry (DESI-MS) method was developed to determine methylglyoxal (MG) present in beers. This method utilized 1,2-diamino-4,5-dimethoxybenzene to convert MG to 6,7-dimethoxy-2-methylquinoxaline, and then determined the derivative by DESI-MS. $1 \times 10^{-5} \text{ mol} \cdot \text{L}^{-1}$ MG in water and $5 \times 10^{-5} \text{ mol} \cdot \text{L}^{-1}$ MG in Yan Jing beer can be determined using this method. This time-saving method may provide a way for high-throughput analysis of MG in beverages.

Key words [methylglyoxal](#) _ [DESI-MS](#) _ [high-throughput](#) [analysis](#)

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