

APPLICATION OF GC-MS IN THE DETERMINATION OF 3-MONOCHLOROPROPANEDIOLS (3-MCPD) LEVELS IN HYDROLYSED VEGETABLE PROTEIN (OYSTER SAUCE, SOY SAUCE AND OTHER SAUCES)

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Abstracts

This project reports a method to quantitatively determine 3-Monochloropropanediols (3-MCPD) in hydrolysed vegetable proteins (Oyster sauce, Soy sauce and other sauces) for sale to the consumer. After absorption of diluted aqueous sample on Extrelut column, 3-MCPDs are extracted with diethyl ether, derivatised Heptafluorobutyrylimidazole (HFBI), and measured by gas chromatography using mass spectrometric detection. Limit of detection achievable with other procedures were achieved by using the most sensitive single ion monitoring detection (SIM), which facilitated the determination of 3-MCPD in the low 0.01 mg/kg range.

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