The Evaluation of Multi-Pesticide Screening Methods by GC/MS

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Abstract

The current work demonstrates that multi-residue screening using Zebron MultiResidue™-1 and Zebron MultiResidue-2 is well suited to confirm the presence of pesticides. Analytical performance was evaluated using a variety of pesticides and compared with other commercially available systems. The phases were used in both Selected Ion Monitoring (SIM) and FullScan modes. The phases were able to separate closely eluting pesticides with high resolution and provided better overall peak shapes. The phases require minimal sample preparation and are compatible with on-column derivatization. The orthogonal selectivity provided by the two phases improves resolution and selectivity offered by the two columns are MS certified, providing excellent peak shapes. The columns provide low bleed on the DB-5ms column. The columns provide maximum resolving power, prevent baseline drift, and provide accurate confirmation. The two phases are similar to the Phenomenex MultiResidue™-1, which is commonly used for multi-residue analysis. The columns provide excellent peak shapes, low bleed, and high resolution. The phases are compatible with on-column derivatization and provide accurate confirmations for samples with interferences in the analytes. The orthogonal selectivity provided by the two phases improves resolution and selectivity offered by the two columns. The columns are MS certified, providing excellent peak shapes. The phases require minimal sample preparation and are compatible with on-column derivatization. The orthogonal selectivity provided by the two phases improves resolution and selectivity. The columns provide low bleed on the DB-5ms column. The columns provide maximum resolving power, prevent baseline drift, and provide accurate confirmation. The two phases are similar to the Phenomenex MultiResidue™-1, which is commonly used for multi-residue analysis. The columns provide excellent peak shapes, low bleed, and high resolution. The phases are compatible with on-column derivatization and provide accurate confirmations for samples with interferences in the analytes. The orthogonal selectivity provided by the two phases improves resolution and selectivity offered by the two columns.