

Short Reports(None)

# Simultaneous Determination of Synthetic Food Dyes by Capillary Zone Electrophoresis

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## Abstract

This paper describes a method for the simultaneous determination of five food dyes [Tartrazine (Y-4), Sunset Yellow FCF(Y-5), Fast Green FCF(G-3), Brilliant Blue FCF(B-1) and Indigo Carmine(B-2)], which are in use as food additives in Japan. The five dyes were separated on a capillary column and identified by their absorbance spectra. The electrophoresis buffer used was a mixture of equal volumes of 25mM sodium phosphate buffer (pH 8.0) and sodium borate buffer (pH 8.0) as reported by Suzuki et al.. As the peak of each of the five dyes was clearly separated from the peaks of the seven other red dyes also used as permitted food additives, this CZE method should be useful for the simultaneous determination of the 12 synthetic dyes used in foods and beverages.

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