

Absorption Curves for Black 7984

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The Colouring Matter in Food Regulations, 1966 (S.I. 1966, No. 1203), which come into operation on 26th June, 1967, permit Black 7984 to be added to foods.

Although chromatographic techniques are very convenient for the separation and preliminary identification of the dyes present in foods, it is important to confirm such findings by comparing the spectrophotometric curve with that from the known colour. The spectrophotometric curves for solutions of Black 7984 in 0.1 N hydrochloric acid and 0.1 N sodium hydroxide solution

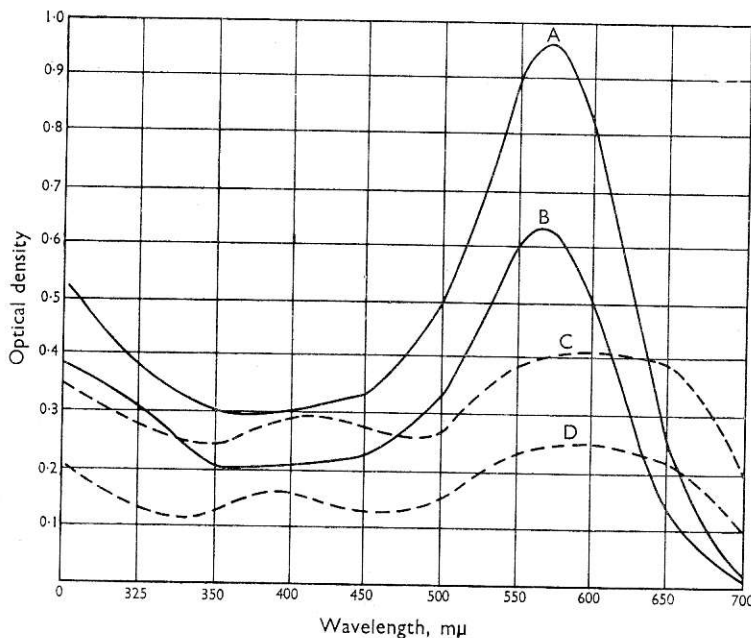


Fig. 1. Absorption curve for Black 7984.

Curve A: 2 mg of dye per 100 ml of 0.1 N HCl soln.

B: 1 mg of dye per 100 ml of 0.1 N HCl soln.

C: 2 mg of dye per 100 ml of 0.1 N NaOH soln.

D: 1 mg of dye per 100 ml of 0.1 N NaOH soln.

are shown in Figure 1. These were obtained using a Unicam SP 800 recording spectrophotometer in solutions containing 1 mg and 2 mg per 100 ml of solvent. A 1-cm cell was employed.

The wavelengths of the main peaks were found at $565\text{ m}\mu$ in acid solution and $600\text{ m}\mu$ in alkali. The neutral curve obtained using 2 mg of dye per 100 ml of 0.02 per cent. ammonium acetate was intermediate between the acid and alkali curves.

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Note. The absorption curves of the other permitted coal-tar colours are illustrated in "Separation and Identification of Food Colours Permitted by the Colouring Matter in Food Regulations, 1957", which was published by the Association of Public Analysts in 1960.