

GREEN CLOUD POINT EXTRACTION COUPLED FOR SEPARATION AND DETERMINATION OF ERYTHROSINE IN VARIOUS SAMPLES COMPARED TO THE HPLC TECHNIQUE

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References:

1. Erbas, Z., & Soylak, M. (2020). A green and simple liquid-phase micro extraction based on deep eutectic solvent for the erythrosine prior to its UV–VIS spectrophotometric detection. *Journal of the Iranian Chemical Society*, 17(10), 2675-2681.
2. Ozkantar, N., Yilmaz, E., Soylak, M., & Tuzen, M. (2019). Separation, enrichment and spectrophotometric determination of erythrosine (E127) in drug, cosmetic and food samples by heat-induced homogeneous liquid–liquid microextraction method. *International Journal of Environmental Analytical Chemistry*, 99(12), 1135-1147.
3. AL-Ramahy, A. A. A. M. (2021, August). Study of the Effect of Solvent Polarity on Transitions of Absorption and Fluorescence Spectrum of a Erythrosine Dye. In *Materials Science Forum* (Vol. 1039, pp. 426-433). Trans Tech Publications Ltd.
4. Verkhoturov, D. S., Crulhas, B. P., Eller, M. J., Han, Y. D., Verkhoturov, S. V., Bisrat, Y., ... & Schweikert, E. A. (2021). Nanoprojectile secondary ion mass spectrometry for analysis of extracellular vesicles. *Analytical Chemistry*, 93(20), 7481-7490.
5. Gopal, T. (2023). Determination of Synthetic Dye (Erythrosine) Present In the Watermelon by HPLC Method. *Acta Biomed*, 94(2), e2023050.
6. Nowak, P. M. (2020). Simultaneous quantification of food colorants and preservatives in sports drinks by the high performance liquid chromatography and capillary electrophoresis methods evaluated using the red-green-blue model. *Journal of Chromatography A*, 1620, 460976.
7. Ahmad, W., Aljuhani, E. H., Alwael, H., Assirey, E. A., Nassef, H. M., & El-Shahawi, M. S. (2023). Redox impulse, computational calculation of molecular energy potentials and ultra-trace determination of the food colorant erythrosine b in fruit jams, soft drinks and water. *Journal of Food Composition and Analysis*, 117, 105110.
8. Emiroğlu, E., Yuvali, D., Sarp, G., Yilmaz, E., & Narin, I. (2021). Magnetic solid phase extraction of erythrosine (E127) in pharmaceutical samples with Fe₃O₄/C-nanodots hybrid material prior to spectrophotometric analysis. *Microchemical Journal*, 170, 106766.
9. Elfadil, D., Della Pelle, F., Compagnone, D., & Amine, A. (2022). Green Synthesis of Molecularly Imprinted Polymers for Dispersive Magnetic Solid-Phase Extraction of Erythrosine B Associated with Smartphone Detection in Food Samples. *Materials*, 15(21), 7653.
10. Üstün Özgür, M., & Delmidan, M. (2019). Development and validation of an effective spectrophotometric method for simultaneous determination of synthetic colorants after cloud point extraction and comparison with new green HPLC method. *Journal of AOAC International*, 102(4), 1241-1252.
11. Yuvali, D., Seyhaneyildizi, M., Soylak, M., Narin, İ., & Yilmaz, E. (2021). An environment-friendly and rapid liquid-liquid microextraction based on new synthesized hydrophobic deep eutectic solvent for separation and pre-concentration of erythrosine (E127) in biological and pharmaceutical samples. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 244, 118842.
12. El-Kommos, M. E., El-Gizawy, S. M., Atia, N. N., & Hosny, N. M. (2013). Spectrophotometric determination of some non-sedating antihistamines using erythrosine B. *International Scholarly Research Notices*, 2013.
13. Ramakrishnan, S. P., Bagya Lakshmi, J., & Surya, P. R. (2011). Estimation of synthetic dye erythrosine in food stuff and formulation and effect of dye on the protein binding of drug in BSA. *Der Pharmacia Lettre*, 3(3), 361-373.
14. Nambiar, A. P., Sanyal, M., & Shrivastav, P. S. (2017). Performance evaluation and thermodynamic studies for the simultaneous cloud point extraction of erythrosine and tartrazine using mixed micelles in food samples. *Food analytical methods*, 10, 3471-3480.
15. Hameed, S. M., & Abdulwahid, M. S. (2022). Extraction and Pre-concentration of Cd (II) by using Crown Ether DB18C6. *Research Journal of Pharmacy and Technology*, 15(6), 2451-2454.
16. Azeez, D. T. (2022). Development of spectrophotometric method to assay sulfadiazine in pure and in pharmaceutical dosage form through diazotization and coupling reaction. *Rafidain Journal of Science*, 31(1), 23-34.
17. Jawad, S. K., & Ridha, R. K. (2019). Cloud point extraction coupled with liquid ion exchange for separation and determination Mn (VII) in real samples. *Research Journal of Pharmacy and Technology*, 12(10), 4861-4866.

18. Gürkan, R., & Kartal Temel, N. (2020). Manganese sensitised-indirect determination of melamine in milk-based samples by flame atomic absorption spectrometry coupled with ultrasound assisted-cloud point extraction. *International Journal of Environmental Analytical Chemistry*, 100(2), 152-174.
19. Hameed, S. M., Hussain, S. A., & Al-Khkany, A. J. (2022). Extraction for Mo (VI), W (VI) and Mn (VII) as Oxyanions by Incorporation Cloud Point with Liquid Ion Exchange Methods. *Research Journal of Pharmacy and Technology*, 15(8), 3685-3689.
20. Azooz, E. A., Wannas, F. A., & Jawad, S. K. (2021). Developed cloud point extraction coupled with onium system for separation and determination cobalt in biological samples. *Research Journal of Pharmacy and Technology*, 14(2), 594-598.
21. Mohsin, A. K., & Ali, H. M. (2023). Analytical Studies and Biological Activity of New Azo Dye and Its Complexation with Zinc. *Biomedicine and Chemical Sciences*, 2(1), 31-38.
22. Mutar, M. M., & Ali, H. M. (2021, November). Preparation, Characterization and Analytical Studies of novel Azo dyes and Diazo dyes. In *Journal of Physics: Conference Series* (Vol. 2063, No. 1, p. 012023). IOP Publishing.
23. Naser, N. A., Alasedi, K. M., & Khan, Z. A. (2018). New approach for determination of sulfadiazine in pharmaceutical preparations using 4 (4-sulphophenylazo) pyrogallol: Kinetic spectrophotometric method. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 201, 267-280.
24. Sukumar, V., Chanduluru, H. K., & Chinnusamy, S. (2023). Ecofriendly analytical quality by design-based method for determining Metronidazole, Lidocaine and Miconazole using RP-HPLC in semisolid dosage form. *Journal of Taibah University for Science*, 17(1), 2252593.
25. Abdelazim, A. H., & Ramzy, S. (2022). Application of different quantitative analytical techniques for estimation of aspirin and omeprazole in pharmaceutical preparation. *BMC chemistry*, 16(1), 60.