

Supplementary file:

Establishment of the new dispersive solid Phase microextraction (DSP- μ E) method with novel adsorbent CaAl-LDH hybrid with g-C₃N₄ utilised for the determination of Pb²⁺ in food and environmental samples

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Supplementary Table S1. Matrix ions effect on developed DSP-μE (N=3).

Ion	Added as	Concentration (mg/L)	Recovery, %
CO₃²⁻	Na ₂ CO ₃	2500	97 ± 9
NO₃⁻	NaNO ₃	3500	98 ± 9
Cl⁻	NaCl	2500	101± 9
Na⁺	NaCl	4000	99 ± 1
K⁺	KCl	4000	101 ± 1
Mg²⁺	Mg(NO ₃) ₂ ·6H ₂ O	2.5	98 ± 8
Cu²⁺	Cu(NO ₃) ₂ ·6H ₂ O	2.5	97 ± 6
Mn²⁺	Mn(NO ₃) ₂ ·6H ₂ O	2.5	101 ± 8
Zn²⁺	Zn(NO ₃) ₂ ·6H ₂ O	2.5	99 ± 8
Ni²⁺	Ni(NO ₃) ₂ ·6H ₂ O	2.5	97 ± 7
Cd²⁺	Cd(NO ₃) ₂ ·6H ₂ O	2.5	101 ± 5
Fe³⁺	Fe(NO ₃) ₃ ·6H ₂ O	2.5	99 ± 8

^a Mean ± Standard deviation

Supplementary Fig. S1. Determination of the point of zero charge (PZC) of the adsorbent

