Determination of total and bioavailable of As and Sb in children's paints using MSFIA system coupled to HG-AFS

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Figure S1. Pareto graph obtained applying Doehlert design for the optimization of the hydride generation used in the determination of As and Sb by MSFIA-HG-AFS system.



Figure S2. Contour graph obtained for the variables through the concentrations of NaBH₄ and KI solutions applied to Doehlert design for determination of As and Sb.



Figure S3. Contour graph obtained for the variables through the concentrations of the solutions of NaBH₄ and HCl applied to Doehlert design for determination of As and Sb.



Figure S4. Contour graph obtained for the variables through the concentrations of the KI and HCl solutions applied to Doehlert design for the determination of As and Sb.

Factor	SS	df	MS	F-value	p-value
(1) Conc NaBH ₄ (L)	8.8 × 10 ⁻¹	1	8.8 ×10⁻¹	50.28	0.02
ConcNaBH4 (Q)	8.2 ×10 ⁻⁵	1	8.2 × 10⁻⁵	3.24 ×10 ⁻³	0.95
(2) Conc KI (L)	13,8 ×10⁻⁴	1	13,8 ×10 ⁻⁴	5.48 ×10 ⁻²	0.80
Conc KI (Q)	2.03 ×10 ⁻³	1	2.03 ×10 ⁻³	8.04 ×10 ⁻²	0.77
(3) Con HCl (L)	4.45 ×10 ⁻²	1	4.45 ×10 ⁻²	1.77	0.25
Conc HCl(Q)	6.2 ×10⁻⁵	1	6.2 × 10 ⁻⁵	2.44 ×10 ⁻³	0.96
1L by 2L	4.02 ×10 ⁻³	1	4.02 ×10 ⁻³	1.50 ×10⁻¹	0.68
1L by 3L	5.32 ×10 ⁻²	1	5.32 ×10 ⁻²	2.11	0.22
2L by 3L	3.20 ×10 ⁻²	1	3.20 ×10 ⁻²	1.27	0.31
Lack of Fit	9.12 × 10 ⁻²	3	3.04 × 10 ⁻²		0.38
Pure Error	0.03	2	0.02		
Total SS	1.14	14			

Table S1. Results of the analysis of variance (ANOVA) obtained for Doehlert design for three variables for determination of As and Sb by MSFIA-HG-AFS.

SS: sum of squares; df: degree of freedom; MS: mean of square; (L): Linear; (Q): Quadratic