Supplementary Materials: Monitoring Acid–Base Titrations on Wax Printed Paper Microzones Using a Smartphone

Sandro A. Nogueira, Lucas R. Sousa, Nathália K. L. Silva, Pedro H. F. Rodrigues and Wendell K. T. Coltro

The calibration of the colorimetric response over a pH range was performed using standard solutions prepared according to the description listed in Table S1.

	Solution A			Solution B		
pН	Composition	Concentration	Volume	Composition	Concentration	Volume
		(mol/L)	(mL)		(mol/L)	(mL)
1	KCl	0.2	25	HCl	0.2	67
2	KCl	0.2	25	HCl	0.2	6,5
3	$KC_8H_5O_4$	0.1	50	HCl	0.1	22.3
4	KC8H5O4	0.1	50	HCl	0.1	0.1
5	KC8H5O4	0.1	50	NaOH	0.1	22.6
6	KH2PO4	0.1	50	NaOH	0.1	5.6
7	KH2PO4	0.1	50	NaOH	0.1	29.1
8	KH ₂ PO ₄	0.1	50	NaOH	0.1	46.1
9	Na ₂ B ₄ O ₇	0.025	50	HCl	0.1	4.6
10	Na2B4O7	0.025	50	NaOH	0.1	18.3
11	NaHCO ₃	0.05	50	NaOH	0.1	22.7
12	K ₂ HPO ₄	0.05	50	NaOH	0.1	26.9

Table S1. Chemical composition of the solutions prepared* at pH range between 1 and 12.

*The final solution was prepared by mixing of the indicated volumes for reaching the desirable pH value. Final volume = 100 mL.