



**Table 5.** The variation of the fractions different  $[\text{Zn}(\text{OH})_i]^{(2-i)+}$  complex specia depending on the concentration of  $\text{HO}^-$  ions in solution.

$[\text{HO}^-] \cdot 10^6$ $\text{mol} \cdot \text{L}^{-1}$ $\alpha_i (\%)$	0.1	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	5.0	6.0	7.0	8.0	9.0	10	15	20	50	100	1000	
$\alpha_0$	99.6	94.1	81.7	67.2	54.1	43.2	34.8	28.3	23.3	16.3	12.0	9.1	7.1	5.8	4.7	2.3	1.2	0.2	0	0	0
$\alpha_1$	0.2	1.2	2.0	2.5	2.7	2.6	2.6	2.5	2.3	2.0	1.8	1.6	1.4	1.3	1.1	0.8	0.6	0.2	0	0	0
$\alpha_2$	0.2	4.7	16.3	30.3	43.2	54.1	62.6	69.2	74.4	81.7	86.2	89.3	91.5	92.9	94.2	96.9	98.0	99.2	99.1	93.2	93.2
$\alpha_3$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4	0.7	6.5
$\alpha_4$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3

**Table 6.** The variation of the fractions different  $[\text{FeCl}_i]^{(3-i)+}$  complex specia depending on the concentration of  $\text{Cl}^-$  ions in solution.

$[\text{Cl}^-] \cdot 10^2$ $\text{mol} \cdot \text{L}^{-1}$ $\alpha_i (\%)$	0.1	0.5	1.0	2.0	3.0	4.0	5.0	7.0	10	20	30	40	50	60	70	80	100	200	500	1000	
$\alpha_0$	97.1	86.6	76.1	60.3	49.3	41.3	35.2	26.6	18.6	7.4	4.4	2.8	1.9	1.4	1.1	0.8	0.6	0.1	0	0	0
$\alpha_1$	2.9	13.1	22.9	36.4	44.7	49.8	53.0	55.9	56.1	48.1	40.3	34.4	29.1	25.7	22.4	20.4	16.8	8.5	2.9	1.1	1.1
$\alpha_2$	0	0.3	1.0	3.3	6.0	8.9	11.8	17.5	25.1	43.9	53.6	60.6	65.8	68.8	71.5	72.9	75.1	75.9	64.1	48.2	48.2
$\alpha_3$	0	0	0	0	0	0	0	0	0.2	0.6	1.7	2.2	3.2	4.1	5.0	5.9	7.5	15.3	32.3	48.6	48.6
$\alpha_4$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7	2.1	2.1