

Table 16: Hg²⁺-Selective Electrodes

ionophore	membrane composition	$\lg K_{\text{Hg}^{2+}, \text{B}^{n+}}$	method	primary ion conc. (M)	interfering ion conc. (M)	slope (mV/decade)	linear range (M)	remarks	ref.
Hg²⁺-1	Hg²⁺-1 (<i>w</i> = 1–4 %), DDP (<i>w</i> = 66–69 %), PVC (<i>w</i> = 30 %)	Ca ²⁺ , –1.8; Co ²⁺ , –1.0; Ni ²⁺ , –0.7; Zn ²⁺ , –1.1; Cd ²⁺ , –1.4; Pb ²⁺ , –1.3; Hg ²⁺ , +1.0	FIM	–	0.01	–	–	<i>K</i> was obtained as $\lg K_{\text{Cu}^{2+}, \text{B}^{n+}}$; conditioned overnight in 10 ^{–3} M CuCl ₂ , pH = 3; internal electrolyte, 10 ^{–2} M CuCl ₂ , pH = 3	[1]
		Ca ²⁺ , –1.6; Co ²⁺ , –0.5; Ni ²⁺ , –0.5; Zn ²⁺ , –1.1; Cd ²⁺ , –0.8; Pb ²⁺ , 0.0; Hg ²⁺ , +1.0	FIM	–	0.01	–	–	<i>K</i> was obtained as $\lg K_{\text{Cu}^{2+}, \text{B}^{n+}}$; conditioned for 3 d in 10 ^{–3} M Cu(NO ₃) ₂ ; pH = 4; internal electrolyte, 10 ^{–2} M CuCl ₂ , pH = 3	
		Ca ²⁺ , –1.1; Co ²⁺ , –0.7; Ni ²⁺ , –0.3; Zn ²⁺ , –1.1; Cd ²⁺ , –0.7; Pb ²⁺ , 0.0; Hg ²⁺ , +3.6	FIM	–	0.01	–	–	<i>K</i> was obtained as $\lg K_{\text{Cu}^{2+}, \text{B}^{n+}}$; conditioned for 2 weeks in 10 ^{–3} M Cu(NO ₃) ₂ , pH = 4; internal electrolyte, 10 ^{–2} M HgCl ₂ , pH = 3	
	Hg²⁺-1 (<i>w</i> = 1–4 %), DDP (<i>w</i> = 66–69 %), PVC (<i>w</i> = 30 %), KTPCIPB (<i>x</i> ₁ = 70 %)	Ca ²⁺ , –0.2; Co ²⁺ , –0.7; Ni ²⁺ , –0.3; Zn ²⁺ , –0.8; Cd ²⁺ , +0.3; Pb ²⁺ , +0.6; Hg ²⁺ , +7.8	FIM	–	0.01	–	–	<i>K</i> was obtained as $\lg K_{\text{Cu}^{2+}, \text{B}^{n+}}$; conditioned overnight in 10 ^{–3} M CuCl ₂ , pH = 3; internal electrolyte, 10 ^{–2} M CuCl ₂ , pH = 3	[1]
		Ca ²⁺ , –0.3; Co ²⁺ , –0.7; Ni ²⁺ , –0.3; Cd ²⁺ , –0.8; Pb ²⁺ , +0.2; Hg ²⁺ , +6.0	FIM	–	0.01	–	–	<i>K</i> was obtained as $\lg K_{\text{Cu}^{2+}, \text{B}^{n+}}$; conditioned for 3 d in 10 ^{–3} M Cu(NO ₃) ₂ , pH = 4; internal electrolyte, 10 ^{–2} M CuCl ₂ , pH = 3	

Table 16: Hg²⁺-Selective Electrodes (Continued)

ionophore	membrane composition	$\lg K_{\text{Hg}^{2+}, \text{B}^{n+}}$	method	primary ion conc. (M)	interfering ion conc. (M)	slope (mV/decade)	linear range (M)	remarks	ref.
		Ca ²⁺ , -0.8; Co ²⁺ , -0.3; Ni ²⁺ , -0.1; Zn ²⁺ , -0.5; Cd ²⁺ , -0.3; Pb ²⁺ , +0.1; Hg ²⁺ , +4.0	FIM	–	0.01	–	–	<i>K</i> was obtained as $\lg K_{\text{Cu}^{2+}, \text{B}^{n+}}$; conditioned for 2 weeks in 10 ⁻³ M Cu(NO ₃) ₂ , pH = 4; internal electrolyte, 10 ⁻² M HgCl ₂ , pH = 3	
	Hg ²⁺ -1 (<i>w</i> = 1 %), oNPOE (<i>w</i> = 69 %), PVC (<i>w</i> = 30 %)	Na ⁺ , -1.2; Ca ²⁺ , -1.4; Co ²⁺ , -1.0; Ni ²⁺ , -1.2; Cu ²⁺ , -0.9; Zn ²⁺ , -2.4; Cd ²⁺ , -2.0; Pb ²⁺ , -1.8; Ag ⁺ , +1.9	SSM	0.01	0.01	–	–	conditioned [2] overnight in H ₂ O; internal electrolyte, 10 ⁻² M CuCl ₂ pH = 3	
		Na ⁺ , -4.3; Ca ²⁺ , -2.9; Ni ²⁺ , -2.6; Cu ²⁺ , -2.4; Zn ²⁺ , -2.7; Cd ²⁺ , -2.9; Pb ²⁺ , -2.7; Ag ⁺ , +2.2	SSM	0.01	0.01	–	–	conditioned in 10 ⁻³ M HgCl ₂ for 2 d, pH = 2; internal electrolyte, 10 ⁻² M HgCl ₂ , pH = 2	
		Na ⁺ , -4.5; Ca ²⁺ , -3.3; Ni ²⁺ , -2.9; Cu ²⁺ , -2.6; Zn ²⁺ , -3.1; Cd ²⁺ , -3.1; Pb ²⁺ , -2.9; Ag ⁺ , +2.3	SSM	0.01	0.01	–	–	conditioned in 10 ⁻³ M HgCl ₂ for 6 d, pH = 2; internal electrolyte, 10 ⁻² M HgCl ₂ , pH = 2	
		Na ⁺ , -4.0; Ca ²⁺ , -3.1; Ni ²⁺ , -2.9; Cu ²⁺ , -2.7; Zn ²⁺ , -2.6; Cd ²⁺ , -2.6; Pb ²⁺ , -2.9; Ag ⁺ , +2.3	SSM	0.01	0.01	–	–	conditioned in 10 ⁻³ M HgCl ₂ for 40 d, pH = 2; internal electrolyte, 10 ⁻² M HgCl ₂ , pH = 2	
		Na ⁺ , -3.7; Ca ²⁺ , -2.7; Ni ²⁺ , -2.9; Cu ²⁺ , -2.7; Zn ²⁺ , -2.9; Cd ²⁺ , -2.9; Pb ²⁺ , -2.7; Ag ⁺ , +1.8	SSM	0.01	0.01	–	–	conditioned in 10 ⁻³ M HgCl ₂ , pH = 3; internal electrolyte, 10 ⁻² M HgCl ₂ , pH = 3	
		Na ⁺ , -0.1; Ca ²⁺ , -1.6; Ni ²⁺ , -1.8; Cu ²⁺ , -2.7; Zn ²⁺ , -1.8; Cd ²⁺ , -2.2; Pb ²⁺ , -1.9; Ag ⁺ , +3.0	SSM	0.01	0.01	–	–	conditioned in 10 ⁻³ M KCl, pH = 3; internal electrolyte, 10 ⁻² M KCl, pH = 3	

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Table 16: Hg²⁺-Selective Electrodes (Continued)

ionophore	membrane composition	$\lg K_{\text{Hg}^{2+}, \text{B}^n+}$	method	primary ion conc. (M)	interfering ion conc. (M)	slope (mV/decade)	linear range (M)	remarks	ref.
		Na ⁺ , -1.3; Ca ²⁺ , -1.7; Ni ²⁺ , -2.4; Zn ²⁺ , -2.4; Cd ²⁺ , -2.0; Pb ²⁺ , -1.7; Ag ⁺ , +2.4	SSM	0.01	0.01	-	-	conditioned in 10 ⁻³ M CuCl ₂ , pH = 3; internal electrolyte, 10 ⁻² M HgCl ₂ , pH = 3	
	Hg²⁺-1 (<i>w</i> = 1 %), oNPOE (<i>w</i> = 66–69 %), KTpCIPB (<i>x</i> _i = 70 %), PVC (<i>w</i> = 30 %)	Na ⁺ , -4.4; Co ²⁺ , -4.8; Ni ²⁺ , -5.6; Zn ²⁺ , -5.8; Pb ²⁺ , -3.6; Ag ⁺ , +1.6	SSM	0.01	0.01	41	10 ⁻⁵ –10 ⁻³	conditioned [2] overnight in H ₂ O; <i>t</i> _{resp} < 45 s; internal electrolyte, 10 ⁻² M CuCl ₂ , pH = 3	
		Na ⁺ , -5.0; Ca ²⁺ , -4.2; Ni ²⁺ , -3.7; Cu ²⁺ , -3.5; Zn ²⁺ , -3.8; Cd ²⁺ , -3.6; Pb ²⁺ , -3.7; Ag ⁺ , +2.4	SSM	0.01	0.01	-	-	conditioned in 10 ⁻³ M HgCl ₂ , for 2 d, pH = 2; internal electrolyte, 10 ⁻² M HgCl ₂ , pH = 2	
		Na ⁺ , -5.2; Ca ²⁺ , -4.5; Ni ²⁺ , -4.2; Cu ²⁺ , -3.5; Zn ²⁺ , -4.0; Cd ²⁺ , -3.9; Pb ²⁺ , -3.9; Ag ⁺ , +2.3	SSM	0.01	0.01	-	-	conditioned in 10 ⁻³ M HgCl ₂ , for 6 d, pH = 2; internal electrolyte, 10 ⁻² M HgCl ₂ , pH = 2	
		Na ⁺ , -4.6; Ca ²⁺ , -4.0; Ni ²⁺ , -3.5; Cu ²⁺ , -3.0; Zn ²⁺ , -3.2; Cd ²⁺ , -3.0; Pb ²⁺ , -3.6; Ag ⁺ , +2.2	SSM	0.01	0.01	-	-	conditioned in 10 ⁻³ M HgCl ₂ , for 40 d, pH = 2; internal electrolyte, 10 ⁻² M HgCl ₂ , pH = 2	
		Na ⁺ , -5.4; Ca ²⁺ , -2.7; Ni ²⁺ , -3.9; Zn ²⁺ , -3.9; Cd ²⁺ , -3.9; Pb ²⁺ , -3.7; Ag ⁺ , +2.6	SSM	0.01	0.01	-	-	conditioned in 10 ⁻³ M HgCl ₂ , pH = 3; internal electrolyte, 10 ⁻² M HgCl ₂ , pH = 3	
		Na ⁺ , +1.3; Ca ²⁺ , -0.8; Ni ²⁺ , -0.9; Cu ²⁺ , -0.6; Zn ²⁺ , -0.9; Cd ²⁺ , -1.3; Pb ²⁺ , -1.0; Ag ⁺ , +2.8	SSM	0.01	0.01	-	-	conditioned in 10 ⁻³ M KCl, pH = 3; internal electrolyte, 10 ⁻² M KCl, pH = 2	
		Na ⁺ , -2.0; Ca ²⁺ , -3.7; Ni ²⁺ , -3.4; Zn ²⁺ , -3.4; Cd ²⁺ , -4.0; Pb ²⁺ , -3.7; Ag ⁺ , +1.3	SSM	0.01	0.01	-	-	conditioned in 10 ⁻³ M CuCl ₂ , pH = 3; internal electrolyte, 10 ⁻² M CuCl ₂ , pH = 2	

Table 16: Hg²⁺-Selective Electrodes (Continued)

ionophore	membrane composition	$\lg K_{\text{Hg}^{2+}, \text{Bn}^{n+}}$	method	primary ion conc. (M)	interfering ion conc. (M)	slope (mV/decade)	linear range (M)	remarks	ref.
Hg²⁺-2	Hg²⁺-2 ($w = 1-4\%$), DDP ($w = 66-69\%$), PVC ($w = 30\%$)	Ca ²⁺ , -1.1; Co ²⁺ , -0.5; Ni ²⁺ , -0.5; Zn ²⁺ , -0.7; Cd ²⁺ , +0.3; Pb ²⁺ , -0.3; Hg ²⁺ , +0.3	FIM	–	0.01	–	–	K was obtained [1] as $\lg K_{\text{Cu}^{2+}, \text{Bn}^{n+}}$; conditioned overnight in 10 ⁻³ M CuCl ₂ , pH = 3; internal electrolyte, 10 ⁻² M CuCl ₂ , pH = 2	
		Ca ²⁺ , -1.6; Co ²⁺ , -0.8; Ni ²⁺ , -0.4; Zn ²⁺ , -0.9; Cd ²⁺ , -1.2; Pb ²⁺ , -0.7; Hg ²⁺ , +1.3	FIM	–	0.01	–	–	K was obtained as $\lg K_{\text{Cu}^{2+}, \text{Bn}^{n+}}$; conditioned for 3 d in 10 ⁻³ M Cu(NO ₃) ₂ , pH = 4; internal electrolyte, 10 ⁻² M CuCl ₂ , pH = 3	
		Ca ²⁺ , -1.3; Co ²⁺ , -0.7; Ni ²⁺ , -0.2; Zn ²⁺ , -1.2; Cd ²⁺ , -0.5; Pb ²⁺ , +0.3; Hg ²⁺ , +4.4	FIM	–	0.01	–	–	K was obtained as $\lg K_{\text{Cu}^{2+}, \text{Bn}^{n+}}$; conditioned for 2 weeks in 10 ⁻³ M Cu(NO ₃) ₂ , pH = 4; internal electrolyte, 10 ⁻² M HgCl ₂ , pH = 3	
	Hg²⁺-2 ($w = 1-4\%$), DDP ($w = 66-69\%$), PVC ($w = 30\%$), KTPCIPB ($x_i = 70\%$)	Ca ²⁺ , +0.5; Co ²⁺ , +0.2; Ni ²⁺ , +0.1; Zn ²⁺ , +0.1; Cd ²⁺ , +0.3; Pb ²⁺ , +0.2; Hg ²⁺ , +5.8	FIM	–	0.01	–	–	K was obtained [1] as $\lg K_{\text{Cu}^{2+}, \text{Bn}^{n+}}$; conditioned overnight in 10 ⁻³ M CuCl ₂ , pH = 3; internal electrolyte: 10 ⁻² M CuCl ₂ , pH = 3	
		Ca ²⁺ , -0.4; Co ²⁺ , -0.2; Ni ²⁺ , -0.1; Zn ²⁺ , -0.5; Cd ²⁺ , +0.1; Pb ²⁺ , +0.0; Hg ²⁺ , +5.6	FIM	–	0.01	–	–	K was obtained as $\lg K_{\text{Cu}^{2+}, \text{Bn}^{n+}}$; conditioned for 3 d in 10 ⁻³ M Cu(NO ₃) ₂ , pH = 4; internal electrolyte, 10 ⁻² M CuCl ₂ , pH = 3	

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Table 16: Hg²⁺-Selective Electrodes (Continued)

ionophore	membrane composition	$\lg K_{\text{Hg}^{2+}, \text{B}^{n+}}$	method	primary ion conc. (M)	interfering ion conc. (M)	slope (mV/decade)	linear range (M)	remarks	ref.
		Ca ²⁺ , -1.0; Co ²⁺ , -0.6; Ni ²⁺ , -0.4; Zn ²⁺ , -1.3; Cd ²⁺ , -0.8; Pb ²⁺ , -0.4; Hg ²⁺ , +3.8	FIM	–	0.01	–	–	<i>K</i> was obtained as $\lg K_{\text{Cu}^{2+}, \text{B}^{n+}}$; conditioned for 2 weeks in 10 ⁻³ M Cu(NO ₃) ₂ , pH 4; internal electrolyte, 10 ⁻² M HgCl ₂ , pH = 3	
	Hg ²⁺ -2 (<i>w</i> = 1 %), oNPOE (<i>w</i> = 69 %), PVC (<i>w</i> = 30 %)	Na ⁺ , -1.5; Ca ²⁺ , -2.2; Ni ²⁺ , -1.7; Zn ²⁺ , -1.8; Cd ²⁺ , -2.4; Pb ²⁺ , -2.2; Ag ⁺ , +1.3	SSM	0.01	0.01	–	–	conditioned [2] overnight in H ₂ O; internal electrolyte, 10 ⁻² M CuCl ₂ , pH = 3	
	Hg ²⁺ -2 (<i>w</i> = 1 %), oNPOE (<i>w</i> = 69 %), PVC (<i>w</i> = 30 %), KTpCIPB (<i>x</i> ₁ = 70 %)	Na ⁺ , -2.7; Ca ²⁺ , -4.1; Ni ²⁺ , -4.2; Co ²⁺ , -4.0; Zn ²⁺ , -4.5; Cd ²⁺ , -4.8; Pb ²⁺ , -4.2; Ag ⁺ , +1.6	SSM	0.01	0.01	38	10 ⁻⁵ –10 ⁻³	conditioned [2] overnight in H ₂ O; internal electrolyte, 10 ⁻² M CuCl ₂ , pH = 3	
Hg ²⁺ -3	Hg ²⁺ -3 (<i>w</i> = 1–4 %), DDP (<i>w</i> = 66–69 %), PVC (<i>w</i> = 30 %)	Ca ²⁺ , -2.0; Co ²⁺ , +0.3; Ni ²⁺ , -1.1; Zn ²⁺ , -1.0; Cd ²⁺ , +1.3; Pb ²⁺ , +0.3; Hg ²⁺ , +1.2	FIM	–	0.01	–	–	<i>K</i> was obtained [1] as $\lg K_{\text{Cu}^{2+}, \text{B}^{n+}}$; conditioned overnight in 10 ⁻³ M CuCl ₂ , pH = 3; internal electrolyte, 10 ⁻² M CuCl ₂ , pH = 3	[1]
		Ca ²⁺ , -1.0; Co ²⁺ , -0.3; Ni ²⁺ , -0.2; Zn ²⁺ , -0.4; Cd ²⁺ , +0.1; Pb ²⁺ , +0.4; Hg ²⁺ , +0.6	FIM	–	0.01	–	–	<i>K</i> was obtained [1] as $\lg K_{\text{Cu}^{2+}, \text{B}^{n+}}$; conditioned for 3 d in 10 ⁻³ M Cu(NO ₃) ₂ , pH = 4; internal electrolyte, 10 ⁻² M CuCl ₂ , pH = 3	[1]
		Ca ²⁺ , -1.7; Co ²⁺ , -0.7; Ni ²⁺ , -0.4; Cd ²⁺ , -0.5; Pb ²⁺ , -0.3; Hg ²⁺ , +2.0	FIM	–	0.01	–	–	<i>K</i> was obtained [1] as $\lg K_{\text{Cu}^{2+}, \text{B}^{n+}}$; conditioned for 2 weeks in 10 ⁻³ M Cu(NO ₃) ₂ , pH = 4; internal electrolyte, 10 ⁻² M HgCl ₂ , pH = 3	[1]

Table 16: Hg²⁺-Selective Electrodes (Continued)

ionophore	membrane composition	$\lg K_{\text{Hg}^{2+}, \text{Bn}^{n+}}$	method	primary ion conc. (M)	interfering ion conc. (M)	slope (mV/decade)	linear range (M)	remarks	ref.
	Hg²⁺-3 (<i>w</i> = 1–4 %), DDP (<i>w</i> = 66–69 %), PVC (<i>w</i> = 30 %), KTPCIPB (<i>x</i> _i = 70 %)	Ca ²⁺ , –0.7; Co ²⁺ , –0.3; Ni ²⁺ , –0.1; Zn ²⁺ , –0.1; Cd ²⁺ , +0.6; Pb ²⁺ , +0.5; Hg ²⁺ , +3.3	FIM	–	0.01	–	–	<i>K</i> was obtained [1] as $\lg K_{\text{Cu}^{2+}, \text{Bn}^{n+}}$; conditioned overnight in 10 ^{–3} M CuCl ₂ , pH = 3; internal electrolyte, 10 ^{–2} M CuCl ₂ , pH = 3	[1]
		Ca ²⁺ , –1.0; Co ²⁺ , –0.4; Ni ²⁺ , –0.4; Zn ²⁺ , –1.1; Cd ²⁺ , –0.8; Pb ²⁺ , –1.7; Hg ²⁺ , +3.0	FIM	–	0.01	–	–	<i>K</i> was obtained [1] as $\lg K_{\text{Cu}^{2+}, \text{Bn}^{n+}}$; conditioned for 3 d in 10 ^{–3} M Cu(NO ₃) ₂ , pH = 4; internal electrolyte, 10 ^{–2} M CuCl ₂ , pH = 3	[1]
		Ca ²⁺ , +0.4; Co ²⁺ , +1.3; Ni ²⁺ , +0.2; Zn ²⁺ , +1.1; Cd ²⁺ , +1.4; Pb ²⁺ , +1.5; Hg ²⁺ , +4.4	FIM	–	0.01	–	–	<i>K</i> was obtained [1] as $\lg K_{\text{Cu}^{2+}, \text{Bn}^{n+}}$; conditioned for 2 weeks in 10 ^{–3} M CuNO ₃ , pH = 4; internal electrolyte, 10 ^{–2} M HgCl ₂ , pH = 3	[1]
	Hg²⁺-3 (<i>w</i> = 1 %), oNPOE (<i>w</i> = 69 %), PVC (<i>w</i> = 30 %)	Na ⁺ , –1.0; Ca ²⁺ , –1.8; Ni ²⁺ , –1.1; Cu ²⁺ , –1.3; Zn ²⁺ , –0.9; Cd ²⁺ , –2.1; Pb ²⁺ , –1.8; Ag ⁺ , +1.6	SSM	0.01	0.01	–	–	conditioned [2] overnight in H ₂ O; internal electrolyte, 10 ^{–2} M CuCl ₂ , pH = 3	[2]
	Hg²⁺-3 (<i>w</i> = 1 %), oNPOE (<i>w</i> = 69 %), PVC (<i>w</i> = 30 %), KTPCIPB (<i>x</i> _i = 70 %)	Na ⁺ , +0.4; Ca ²⁺ , –1.7; Ni ²⁺ , –1.1; Cu ²⁺ , –1.4; Zn ²⁺ , –1.9; Cd ²⁺ , –2.1; Pb ²⁺ , –1.7; Ag ⁺ , +1.7	SSM	0.01	0.01	–	–	conditioned [2] overnight in H ₂ O; internal electrolyte, 10 ^{–2} M CuCl ₂ , pH = 3	[2]
Hg²⁺-4	Hg²⁺-4 (<i>w</i> = 1 %), DOP (<i>w</i> = 20–50 %), PVC (<i>w</i> = 80–49 %)	Co ²⁺ , –2.06; Ni ²⁺ , –2.60; Cu ²⁺ , –1.15; Cd ²⁺ , –2.35; Pb ²⁺ , –0.77; Bi ³⁺ , +0.11; Fe ³⁺ , +0.70; Ce ³⁺ , –1.66	MSM	0.01	0.01	27	10 ^{–5} –10 ^{–2}	coated [3] graphite elec.; pH = 3.4	[3]
Hg²⁺-5	Hg²⁺-5 (<i>w</i> = 2 %), oNPOE (<i>w</i> = 66 %),	Li ⁺ , –3.0; Na ⁺ , –2.9; K ⁺ , –2.8; NH ₄ ⁺ , –2.8;	SSM	10 ^{–3}	10 ^{–3}	–	–	pH = 4.5 [4]	[4]

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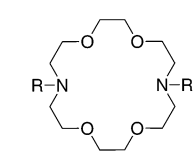
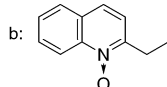
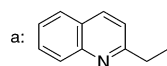
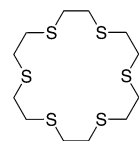
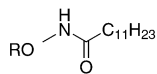
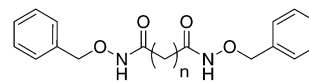
Table 16: Hg²⁺-Selective Electrodes (Continued)

ionophore	membrane composition	$\lg K_{\text{Hg}^{2+}, \text{B}^n+}$	method	primary ion conc. (M)	interfering ion conc. (M)	slope (mV/decade)	linear range (M)	remarks	ref.
	PVC (<i>w</i> = 32 %), KTPCIPB (<i>x</i> _i = 5 %)	Mg ²⁺ , -6.0; Ca ²⁺ , -5.9; Mn ²⁺ , -6.0; Co ²⁺ , -6.0; Ni ²⁺ , -6.2; Cu ²⁺ , -6.1; Zn ²⁺ , -6.2; Cd ²⁺ , -6.1; Pb ²⁺ , -5.7; Cr ³⁺ , -7.0; Fe ³⁺ , -7.1; Ag ⁺ , -0.7							
Hg²⁺-6	Hg²⁺-6 (<i>w</i> = 2 %), oNPOE (<i>w</i> = 66 %), PVC (<i>w</i> = 32 %), KTPCIPB (<i>x</i> _i = 5 %)	Li ⁺ , -5.8; Na ⁺ , -5.8; K ⁺ , -5.6; NH ₄ ⁺ , -5.6; Mg ²⁺ , -8.7; Ca ²⁺ , -8.5; Mn ²⁺ , -9.1; Co ²⁺ , -8.8; Ni ²⁺ , -8.7; Cu ²⁺ , -8.2; Zn ²⁺ , -9.2; Cd ²⁺ , -8.9; Pb ²⁺ , -7.9; Cr ³⁺ , -10.1; Fe ³⁺ , -10.3; Ag ⁺ , -2.2	SSM	10 ⁻³	10 ⁻³	-	-	pH = 4.5	[4]
Hg²⁺-7	Hg²⁺-7 (<i>w</i> = 2 %), oNPOE (<i>w</i> = 66 %), PVC (<i>w</i> = 32 %), KTPCIPB (<i>x</i> _i = 5 %)	Li ⁺ , -3.7; Na ⁺ , -4.1; K ⁺ , -3.3; NH ₄ ⁺ , -3.7; Mg ²⁺ , -6.8; Ca ²⁺ , -6.6; Mn ²⁺ , -7.6; Co ²⁺ , -7.2; Ni ²⁺ , -8.0; Cu ²⁺ , -8.2; Zn ²⁺ , -7.9; Cd ²⁺ , -7.9; Pb ²⁺ , -2.3; Cr ³⁺ , -8.0; Fe ³⁺ , -8.3; Ag ⁺ , +0.6	SSM	10 ⁻³	10 ⁻³	-	-	pH = 4.5	[4]
Hg²⁺-8	Hg²⁺-8 (<i>w</i> = 2 %), oNPOE (<i>w</i> = 66 %), PVC (<i>w</i> = 32 %), KTPCIPB (<i>x</i> _i = 5 %)	Li ⁺ , -9.0; Na ⁺ , -9.1; K ⁺ , -8.1; NH ₄ ⁺ , -8.6; Mg ²⁺ , -12.2; Ca ²⁺ , -12.0; Mn ²⁺ , -12.0; Co ²⁺ , -11.8; Ni ²⁺ , -12.0; Cu ²⁺ , -12.1; Zn ²⁺ , -12.1; Cd ²⁺ , -11.8; Pb ²⁺ , -6.5; Cr ³⁺ , -13.1; Fe ³⁺ , -12.8; Ag ⁺ , -4.7	SSM	10 ⁻³	10 ⁻³	ca. 70	10 ⁻⁵ -10 ⁻²	pH = 4.5; <i>t</i> ₉₅ ≈ 10 s	[4]
		Li ⁺ , -6.0; Na ⁺ , -6.1; K ⁺ , -5.5; NH ₄ ⁺ , -5.8; Mg ²⁺ , -7.6; Ca ²⁺ , -7.5; Mn ²⁺ , -7.5; Co ²⁺ , -7.4; Ni ²⁺ , -7.5; Cu ²⁺ , -7.6; Zn ²⁺ , -7.6; Cd ²⁺ , -7.4; Pb ²⁺ , -4.8; Cr ³⁺ , -8.1; Fe ³⁺ , -7.9; Ag ⁺ , -3.9	SSM	10 ⁻³	10 ⁻³			<i>K</i> values were recalculated using the observed slope value.	

Table 16: Hg²⁺-Selective Electrodes (Continued)

ionophore	membrane composition	$\lg K_{\text{Hg}^{2+}, \text{B}^n+}$	method	primary ion conc. (M)	interfering ion conc. (M)	slope (mV/decade)	linear range (M)	remarks	ref.
Hg²⁺-9	Hg²⁺-9 (<i>w</i> = 2 %), oNPOE (<i>w</i> = 66 %), PVC (<i>w</i> = 32 %), KTPCIPB (<i>x</i> _i = 5 %)	Li ⁺ , -4.9; Na ⁺ , -5.0; K ⁺ , -3.3; NH ₄ ⁺ , -4.0; Mg ²⁺ , -8.0; Ca ²⁺ , -8.6; Mn ²⁺ , -8.3; Co ²⁺ , -7.7; Ni ²⁺ , -8.5; Cu ²⁺ , -8.7; Zn ²⁺ , -8.3; Cd ²⁺ , -8.2; Pb ²⁺ , -5.0; Cr ³⁺ , -9.5; Fe ³⁺ , -9.1; Ag ⁺ , -1.6	SSM	10 ⁻³	10 ⁻³	-	-	pH, 4.5	[4]

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**Hg²⁺-1** (*M_r* = 572.75): R=a**Hg²⁺-2** (*M_r* = 604.75): R=b**Hg²⁺-3** (*M_r* = 599.00): R=cc: -C₁₂H₂₅**Hg²⁺-4** (*M_r* = 360.69)**Hg²⁺-5** (*M_r* = 229.37): R=CH₃**Hg²⁺-6** (*M_r* = 305.46): R=CH₂C₆H₅**Hg²⁺-7** (*M_r* = 356.43): n=4**Hg²⁺-8** (*M_r* = 412.53): n=8**Hg²⁺-9** (*M_r* = 482.67): n=13