

Table 7: NH₄⁺- Selective Electrodes

ionophore	membrane composition	lgK _{NH₄⁺,Bⁿ⁺}	method	primary ion conc. (M)	interfering ion conc. (M)	slope decade)	linear range (M)	remarks	ref.
NH₄⁺-1	NH ₄ ⁺ -1 (w = 25 %), nujol (w = 50 %), octanol (w = 25 %)	Li ⁺ , -3.66; Na ⁺ , -2.57; K ⁺ , -0.40; Rb ⁺ , -0.60; Cs ⁺ , -1.89; H ⁺ , -2.14	SSM	-	-	N	10 ⁻⁵ -10 ⁻³	-	[1]
	NH₄⁺-1 , PVC, tris(2-ethylhexyl) phosphate diphenyl ether (weight ratio not reported)	Na ⁺ , -3.0; K ⁺ , -1.0; Mg ²⁺ , -4.7; Ca ²⁺ , -4.3	FIM	-	-	55.5	10 ⁻⁶ -10 ⁻¹	-	[2]
	NH₄⁺-1 (w = 1 %), DOA (w = 66.8 %), PVC (w = 32.2 %)	Na ⁺ , -2.62; K ⁺ , -0.89; Mg ²⁺ , -3.87; Ca ²⁺ , -2.62	SSM	0.01	0.01	57.5	-	t _{resp} = 30 s	[3]
		Na ⁺ , -2.87; K ⁺ , -0.96	FIM	-	Na ⁺ , 1 K ⁺ , 0.1	-	-	-	-
	NH₄⁺-1 (w = 1.9 %), DOA (w = 30.2 %), PVC (w = 34 %), VAGH (w = 34 %)	Na ⁺ , -2.47; K ⁺ , -0.82; Mg ²⁺ , -3.60; Ca ²⁺ , -2.73	SSM	0.01	0.01	55.5	-	t _{resp} = 30 s; c _{dl} = 10 ⁻⁵ M	[3]
	NH₄⁺-1 (w = 1.9 %), DEA (w = 30.2 %), PVC (w = 67.9 %)	Na ⁺ , -1.76; K ⁺ , -0.92; Mg ²⁺ , -3.20; Ca ²⁺ , -2.06	SSM	0.01	0.01	55.5	-	t _{resp} = 30 s; c _{dl} = 10 ⁻⁵ M	[3]
	NH₄⁺-1 (w = 1.9 %), oNPPE (w = 30.2 %), PVC (w = 67.9 %)	Na ⁺ , -2.2; K ⁺ , -0.82; Mg ²⁺ , -3.54; Ca ²⁺ , -2.49	SSM	0.01	0.01	47.0	-	t _{resp} = 30 s; c _{dl} = 10 ⁻⁵ M	[3]
	NH₄⁺-1 (w = 1.9 %), DOPP (w = 30.2 %), PVC (w = 67.9 %)	Na ⁺ , -1.84; K ⁺ , -1.15; Mg ²⁺ , -2.85; Ca ²⁺ , -1.39	SSM	0.01	0.01	53.0	-	t _{resp} = 30 s; c _{dl} = 10 ⁻⁵ M	[3]
	NH₄⁺-1 (w = 1.9 %), DOS (w = 30.2 %), PVC (w = 67.9 %)	Na ⁺ , -2.28; K ⁺ , -0.68; Mg ²⁺ , -3.78; Ca ²⁺ , -2.59	SSM	0.01	0.01	58.0	-	t _{resp} = 30 s; c _{dl} = 10 ⁻⁵ M	[3]
	NH₄⁺-1 (w = 1.9 %), DBP (w = 30.2 %), PVC (w = 67.9 %)	Na ⁺ , -1.96; K ⁺ , -0.89; Mg ²⁺ , -3.55; Ca ²⁺ , -2.42	SSM	0.01	0.01	52.5	-	t _{resp} = 30 s; c _{dl} = 10 ⁻⁵ M	[3]
	NH₄⁺-1 (w = 1.9 %), tripentyl phosphate (w = 30.2 %), PVC (w = 67.9 %)	Na ⁺ , -1.59; K ⁺ , -0.92; Mg ²⁺ , -3.25; Ca ²⁺ , -2.08	SSM	0.01	0.01	55.0	-	t _{resp} = 30 s; c _{dl} = 10 ⁻⁵ M	[3]
	NH₄⁺-1 (w = 4.6 %), DOA (w = 29.4 %), PVC (w = 66 %)	Na ⁺ , -2.63; K ⁺ , -0.82; Mg ²⁺ , -4.13; Ca ²⁺ , -3.96	SSM	0.01	0.01	55.0	-	t _{resp} = 30 s; c _{dl} = 10 ⁻⁵ M	[3]
	NH₄⁺-1 (w = 0.2 %), DOA (w = 30.7 %), PVC (w = 69.1 %)	Na ⁺ , -2.51; K ⁺ , -0.96; Mg ²⁺ , -4.01; Ca ²⁺ , -3.99	SSM	0.01	0.01	56.2	-	t _{resp} = 30 s; c _{dl} = 10 ⁻⁵ M	[3]
		Na ⁺ , -1.85; K ⁺ , -0.96;	FIM	-	Na ⁺ , 1	-	-	-	-

Table 7: NH₄⁺- Selective Electrodes (Continued)

ionophore	membrane composition	$\lg K_{\text{NH}_4^+, \text{B}^{n+}}$	method	primary ion conc. (M)	interfering ion conc. (M)	slope decade)	linear range (M)	remarks	ref.
		Mg ²⁺ , Ca ²⁺ , no interference			K ⁺ , 0.1				
	NH₄⁺-1 (<i>w</i> = 1.9 %), dinonyl adipate (<i>w</i> = 30.2 %), PVC (<i>w</i> = 67.9 %), KTpCIPB (<i>x_i</i> = 67 %)	K ⁺ , +0.30	SSM	0.01	0.01	53.0	–	<i>t</i> _{resp} = 30 s; <i>c</i> _{dl} = 10 ⁻⁵ M	[3]
	NH₄⁺-1 (<i>w</i> = 1.9 %), dinonyl adipate (<i>w</i> = 30.2 %), PVC (<i>w</i> = 67.9 %), KTpCIPB (<i>x_i</i> = 168 %)	K ⁺ , +0.4	SSM	0.01	0.01	54.0	–	<i>t</i> _{resp} = 30 s; <i>c</i> _{dl} = 10 ⁻⁵ M	[3]
	NH₄⁺-1 (<i>w</i> = 1.9 %), DOA (<i>w</i> = 30.2 %), PVC (<i>w</i> = 67.9 %), KTpCIPB (<i>x_i</i> = 235 %)	K ⁺ , +0.34	SSM	0.01	0.01	53.0	–	<i>t</i> _{resp} = 30 s; <i>c</i> _{dl} = 10 ⁻⁵ M	[3]
	NH₄⁺-1 , cellulose triacetate	Li ⁺ , -4.7; Na ⁺ , -2.9; K ⁺ , -0.9; H ⁺ , -4.3; N(CH ₃) ₄ ⁺ , -3.7; Mg ²⁺ , -3.2; Ca ²⁺ , -5.0	SSM	0.1	0.1	–	–	asymmetric membrane	[4]
	NH₄⁺-1 , hydroxylated cellulose triacetate	Li ⁺ , -4.5; Na ⁺ , -2.9; K ⁺ , -0.9; H ⁺ , -4.3; N(CH ₃) ₄ ⁺ , -3.7; Mg ²⁺ , -3.2; Ca ²⁺ , -4.8	SSM	0.1	0.1	–	–	asymmetric membrane	[4]
	NH₄⁺-1 , aminated cellulose triacetate	Li ⁺ , -4.5; Na ⁺ , -2.9; K ⁺ , -0.9; H ⁺ , -4.3; N(CH ₃) ₄ ⁺ , -4.2; Mg ²⁺ , -3.2; Ca ²⁺ , -4.9	SSM	0.1	0.1	–	–	asymmetric membrane	[4]
	NH₄⁺-1 (<i>w</i> = 10 %), KTpCIPB (<i>x_i</i> = 12 %), DBS (<i>w</i> = 86.5 %), PVC (<i>w</i> = 2.5 %)	Na ⁺ , -2.7; K ⁺ , -1.0; Mg ²⁺ , no interference; Ca ²⁺ , no interference	FIM	–	Na ⁺ , 3.13 mM K ⁺ , 200 μM	57.6 ± 1.1	10 ⁻⁵ –10 ⁻³	minielectr.; <i>c</i> _{dl} = 10 ⁻⁶ M; FIA	[5]
	NH₄⁺-1 (<i>w</i> = 1 %), DOA (<i>w</i> = 66 %), polyurethane (<i>w</i> = 26.4 %), PVA (<i>w</i> = 6.6 %)	Li ⁺ , -4.8; Na ⁺ , -3.2; K ⁺ , -1.2; N(CH ₃) ₄ ⁺ , -4.0; H ⁺ , -4.4; Mg ²⁺ , -4.7; Ca ²⁺ , -4.7	SSM	–	–	48	–	PVA: poly- (vinylchloride/vinyl acetate/vinyl alcohol); ISFET; <i>t</i> _{resp} < 10 s	[6]

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Table 7: NH₄⁺- Selective Electrodes (*Continued*)

ionophore	membrane composition	$\lg K_{\text{NH}_4^+, \text{B}^{n+}}$	method	primary ion conc. (M)	interfering ion conc. (M)	slope (decade)	linear range (M)	remarks	ref.
	NH ₄ ⁺ -1 (<i>w</i> = 1 %), DOA (<i>w</i> = 66 %), polyurethane (<i>w</i> = 26.4 %), PVA (<i>w</i> = 6.6 %)	Li ⁺ , -4.1; Na ⁺ , -3.1; K ⁺ , -1.2; N(CH ₃) ₄ ⁺ , -3.9; H ⁺ , -3.5; Mg ²⁺ , -4.4; Ca ²⁺ , -4.5	SSM	-	-	48	-	PVA: poly- (vinylchloride/vinyl acetate/vinyl alcohol); ISFET; Membrane surface was covered with hydrophilic polyurethane.	[6]
	NH ₄ ⁺ -1 (<i>w</i> = 1 %), DOA (<i>w</i> = 66 %), polyurethane (<i>w</i> = 26.4 %), PVA (<i>w</i> = 6.6 %)	Li ⁺ , -4.8; Na ⁺ , -3.2; K ⁺ , -1.2; N(CH ₃) ₄ ⁺ , -4.0; H ⁺ , -4.4; Mg ²⁺ , -4.7; Ca ²⁺ , -4.7	SSM	-	-	48	-	PVA: poly- (vinylchloride/vinyl acetate/vinyl alcohol); ISFET; Membrane was covered with hydrophilic poly- urethane loaded with polylysine.	[6]
	NH ₄ ⁺ -1 (<i>w</i> = 1.9 %), KTPCIPB (<i>x</i> _i = 33 %), DOS (<i>w</i> = 67 %), PVC (<i>w</i> ≈ 31 %)	Na ⁺ , -0.73; K ⁺ , -0.61	FIM	-	-	49.2	10 ⁻⁵ -10 ⁻²	FIA	[7]
	NH ₄ ⁺ -1 (<i>w</i> = 3 %), PVC (<i>w</i> = 30 %), BEHS (<i>w</i> = 66.5 %), KTPCIPB (<i>x</i> _i = 21 %)	Li ⁺ , -3.5; Na ⁺ , -2.4; K ⁺ , -1.0; Rb ⁺ , -1.5; Cs ⁺ , -2.4; Mg ²⁺ , -4.0; Ca ²⁺ , -3.8; Sr ²⁺ , -3.6; Ba ²⁺ , -4.0	SSM	0.1	0.1	-	-	-	[8]
	NH ₄ ⁺ -1 (<i>w</i> = 4.4 %), silicone rubber (<i>w</i> = 94.15 %), KTPCIPB (<i>x</i> _i = 41 %)	Na ⁺ , -2.5; K ⁺ , -0.8 Na ⁺ , -2.3	FIM	-	0.01	46	-	<i>c</i> _{dl} = 4 × 10 ⁻⁵ M	[9]
	NH ₄ ⁺ -1 (<i>w</i> = 2.1 %), silicone rubber (<i>w</i> = 69.1 %), BEHS (<i>w</i> = 28 %), KTPCIPB (<i>x</i> _i = 48 %)	Na ⁺ , -3.1; K ⁺ , -0.8	FIM	-	Na ⁺ , 0.01 K ⁺ , 0.001	54	-	<i>c</i> _{dl} = 4 × 10 ⁻⁵ M; <i>τ</i> > 7 d	[9]
NH ₄ ⁺ -1/ NH ₄ ⁺ -2	NH ₄ ⁺ -1/NH ₄ ⁺ -2 (72:28) tris(2-ethylhexyl) phosphate (weight ratio not reported)	Li ⁺ , -2.38; Na ⁺ , -2.70; K ⁺ , -0.92; Rb ⁺ , -1.37; Cs ⁺ , -2.32; H ⁺ , -1.80; Ca ²⁺ , -3.77	FIM	-	0.1	58.0	10 ⁻⁵ -10 ⁻¹	25 °C; micro- electrode	[10]
	NH ₄ ⁺ -1/NH ₄ ⁺ -2 (72:28; <i>w</i> = 0.5 %), PVC (<i>w</i> = 32.7 %), DOA (<i>w</i> = 66.8 %)	Li ⁺ , -4.3; Na ⁺ , -2.9; K ⁺ , -0.9; Rb ⁺ , -1.3; Cs ⁺ , -2.4; H ⁺ , -3.6;	SSM	0.1	0.1	57.5 ± 1.5	10 ⁻⁵ -10 ⁻¹	r.o.o.g.; minielectrode; 22 °C;	[11]

Table 7: NH₄⁺- Selective Electrodes (Continued)

ionophore	membrane composition	lgK _{NH₄⁺,Bⁿ⁺}	method	primary ion conc. (M)	interfering ion conc. (M)	slope decade)	linear range (M)	remarks	ref.
		Mg ²⁺ , -5.1; Ca ²⁺ , -5.1; Sr ²⁺ , -5.0; Ba ²⁺ , -4.7						<i>t</i> _{resp} < 1 min	
	NH ₄ ⁺ -1/NH ₄ ⁺ -2 (72:28; w = 0.5 %), PVC (w = 32.7 %), DOA (w = 66.8 %)	Li ⁺ , -3.6; Na ⁺ , -2.9; K ⁺ , -0.8; Rb ⁺ , -1.2; Cs ⁺ , -2.4; H ⁺ , -3.8; Mg ²⁺ , -5.5; Ca ²⁺ , -4.8; Sr ²⁺ , -5.1; Ba ²⁺ , -5.5	SSM	0.1	0.1	57.5 ± 1.5	10 ⁻⁵ –10 ⁻¹	22 °C; r.o.o.g.; <i>t</i> _{resp} < 1 min	[11]
	NH ₄ ⁺ -1/NH ₄ ⁺ -2 (72:28; w = 1.1 %), crosslinking agent (w = 13.6 %), silicone rubber (w = 85.3 %)	Li ⁺ , -4.6; Na ⁺ , -2.8; K ⁺ , -0.7; Rb ⁺ , -1.1; Cs ⁺ , -2.3; Mg ²⁺ , -4.9; Ca ²⁺ , -4.8; Sr ²⁺ , -5.1; Ba ²⁺ , -5.3	SSM	0.1	0.1	57.8 ± 0.4	10 ⁻⁶ –10 ⁻¹		[12]
	NH ₄ ⁺ -1/NH ₄ ⁺ -2 (75:25; satn.), tris(2-ethylhexyl) phosphate	H ⁺ , -4.7 Na ⁺ , -0.17; K ⁺ , -0.07; Ca ²⁺ , -1.15	FIM	–	0.01				
	NH ₄ ⁺ -1/NH ₄ ⁺ -2 (75:25; satn.), tris(2-ethylhexyl) phosphate	Na ⁺ , -0.17; K ⁺ , -0.07; Ca ²⁺ , -1.15	FIM	–	0.1	50–55	10 ⁻⁵ –10 ⁻¹	20 ± 0.5 °C; [13] microelectrode; <i>t</i> ₉₀ = 10 s; 5 < pH < 8	
	NH ₄ ⁺ -1/NH ₄ ⁺ -2 (75:25; w = 10 %), NaTPB (x _i = 18 %), oNPOE (w = 89 %)	Na ⁺ , -1.70; K ⁺ , -0.42; Ca ²⁺ , -2.7 0	FIM	–	0.1	50–55	10 ⁻⁵ –10 ⁻¹	20 ± 0.5 °C; [13] microelectrode; <i>t</i> ₉₀ = 10 s; 5 < pH < 8	
	NH ₄ ⁺ -1/NH ₄ ⁺ -2 (75:25; w = 10 %), oNPOE (w = 90 %)	Na ⁺ , -1.70; K ⁺ , -0.40; Ca ²⁺ , -1.15	FIM	–	0.1	50–55	10 ⁻⁵ –10 ⁻¹	20 ± 0.5 °C; [13] microelectrode; <i>t</i> ₉₀ = 10 s; 5 < pH < 8	
	NH ₄ ⁺ -1/NH ₄ ⁺ -2 (75:25; w = 10 %), KTpCIPB (x _i = 12 %), oNPOE (w = 89 %)	Na ⁺ , -1.7; K ⁺ , -0.42; Ca ²⁺ , -2.7	FIM	–	0.1	50–55	10 ⁻⁵ –10 ⁻¹	20 ± 0.5 °C; [13] microelectrode; <i>t</i> ₉₀ = 10 s; 5 < pH < 8	
	NH ₄ ⁺ -1/NH ₄ ⁺ -2 (75:25; w = 6.9 %), KTpCIPB (x _i = 12 %), oNPOE (w = 92.4 %)	Li ⁺ , -3.6; Na ⁺ , -2.0; K ⁺ , -0.6; Rb ⁺ , -0.9; Cs ⁺ , -1.7; H ⁺ , -2.2; N(CH ₃) ₄ ⁺ , -1.8; AcCh ⁺ , -1.9; Mg ²⁺ , -4.4; Ca ²⁺ , -4.2; Sr ²⁺ , -4.1; Ba ²⁺ , -3.8; Mn ²⁺ , -3.8; Co ²⁺ , -3.7	SSM	0.1	0.1	59.2	10 ⁻⁵ –10 ⁻¹	22 ± 1 °C; [14] microelectrode	

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Table 7: NH₄⁺- Selective Electrodes (*Continued*)

ionophore	membrane composition	$\lg K_{\text{NH}_4^+/\text{B}^{n+}}$	method	primary ion conc. (M)	interfering ion conc. (M)	slope decade)	linear range (M)	remarks	ref.
	NH₄⁺-1/NH₄⁺-2 (75:25; <i>w</i> = 0.75 %), DOS (<i>w</i> = 66 %), PVC (<i>w</i> = 33 %), KTPCIPB (<i>x</i> ₁ = 41 %)	Li ⁺ , -2.66; Na ⁺ , -2.17; K ⁺ , +0.24; Mg ²⁺ , -4.09; Ca ²⁺ , -4.11	SSM	–	–	55.2 ± 0.98	–	<i>c</i> _{dl} = 5 × 10 ⁻⁶ M	[15]
		Li ⁺ , -1.98; Na ⁺ , -2.11; K ⁺ , +0.09; Mg ²⁺ , -3.08	FIM	–	0.01				
	NH₄⁺-1/NH₄⁺-2 (75:25; <i>w</i> = 0.75 %), oNPPE (<i>w</i> = 66 %), PVC (<i>w</i> = 33 %), KTPCIPB (<i>x</i> ₁ = 41 %)	Li ⁺ , -2.43; Na ⁺ , -1.98; K ⁺ , -0.38; Mg ²⁺ , -3.94; Ca ²⁺ , -3.92	SSM	–	–	55.2 ± 0.98	–	<i>c</i> _{dl} = 5 × 10 ⁻⁶ M	[15]
		Li ⁺ , -2.11; Na ⁺ , -2.00; K ⁺ , -1.95; Mg ²⁺ , -3.05; Ca ²⁺ , -3.11	FIM	–	0.01				
	NH₄⁺-1/NH₄⁺-2 (75:25; <i>w</i> = 0.75 %), DBS (<i>w</i> = 66 %), PVC (<i>w</i> = 33 %), KTPCIPB (<i>x</i> ₁ = 41 %)	Li ⁺ , -2.11; Na ⁺ , -2.49; K ⁺ , -0.26; Mg ²⁺ , -3.77; Ca ²⁺ , -3.80	SSM	–	–	55.2 ± 0.98	–	<i>c</i> _{dl} = 5 × 10 ⁻⁶ M	[15]
		Li ⁺ , -2.25; Na ⁺ , -2.05; K ⁺ , -0.87; Mg ²⁺ , -3.77; Ca ²⁺ , -3.08	FIM	–	0.01				
	NH₄⁺-1/NH₄⁺-2 (75:25; <i>w</i> = 0.75 %), TOP* (<i>w</i> = 66 %), PVC (<i>w</i> = 33 %), KTPCIPB (<i>x</i> ₁ = 41 %)	Li ⁺ , -0.74; Na ⁺ , -2.30; K ⁺ , -0.42; Mg ²⁺ , -3.73; Ca ²⁺ , -2.89	SSM	–	–	55.2 ± 0.98	–	<i>c</i> _{dl} = 5 × 10 ⁻⁶ M * trioctyl phosphate	[15]
		Li ⁺ , -1.71; Na ⁺ , -1.78; K ⁺ , -0.80; Mg ²⁺ , -3.02; Ca ²⁺ , -3.08	FIM	–	0.01				
	NH₄⁺-1/NH₄⁺-2 (75:25; <i>w</i> = 0.75 %), DOA (<i>w</i> = 66 %), PVC (<i>w</i> = 33 %), KTPCIPB (<i>x</i> ₁ = 41 %)	Li ⁺ , -2.58; Na ⁺ , -2.37; K ⁺ , -0.06; Mg ²⁺ , -3.92; Ca ²⁺ , -3.96	SSM	–	–	55.2 ± 0.98	–	<i>c</i> _{dl} = 5 × 10 ⁻⁶ M	[15]
		Li ⁺ , -2.08; Na ⁺ , -2.11; K ⁺ , -0.91; Mg ²⁺ , -3.22; Ca ²⁺ , -3.32	FIM	–	0.01				
	NH₄⁺-1/NH₄⁺-2 (75:25; <i>w</i> = 0.75 %), DOPP (<i>w</i> = 66 %), PVC (<i>w</i> = 33 %), KTPCIPB (<i>x</i> ₁ = 41 %)	Li ⁺ , -0.76; Na ⁺ , -1.58; K ⁺ , -0.62; Mg ²⁺ , -2.89; Ca ²⁺ , -2.57	SSM	–	–	55.2 ± 0.98	–	<i>c</i> _{dl} = 5 × 10 ⁻⁶ M	[15]
		Li ⁺ , -0.97; Na ⁺ , -1.49; K ⁺ , -0.91; Mg ²⁺ , -3.00; Ca ²⁺ , -2.67	FIM	–	0.01				

Table 7: NH_4^+ - Selective Electrodes (Continued)

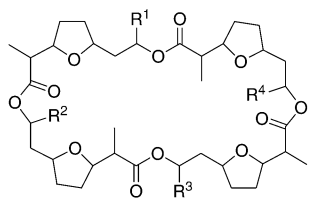
ionophore	membrane composition	$\lg K_{\text{NH}_4^+,\text{B}^n+}$	method	primary ion conc. (M)	interfering ion conc. (M)	slope decade)	linear range (M)	remarks	ref.
	NH₄⁺-1/NH₄⁺-2 (75:25; <i>w</i> = 0.75 %), oNPOE (<i>w</i> = 66 %), PVC (<i>w</i> = 33 %), KTPCIPB (<i>x</i> _i = 41 %)	Li ⁺ , -2.89; Na ⁺ , -2.32; K ⁺ , -1.11; Mg ²⁺ , -4.02; Ca ²⁺ , -3.91	SSM	–	0.01	55.2 ± 0.98	–	<i>c</i> _{dl} = 5 × 10 ⁻⁶ M	[15]
		Li ⁺ , -3.30; Na ⁺ , -2.14; K ⁺ , -1.38; Mg ²⁺ , -4.20; Ca ²⁺ , -2.62	FIM	–	0.01				
NH₄⁺-3	NH₄⁺-3 (<i>w</i> = 1 %), DOA (<i>w</i> = 66.8 %), PVC (<i>w</i> = 32.2 %)	Na ⁺ , +0.32; K ⁺ , +0.41	SSM	0.01	0.01	45.0	–	<i>t</i> _{resp} = 30 s	[3]
NH₄⁺-4	NH₄⁺-4 (<i>w</i> = 1 %), DOA (<i>w</i> = 66.8 %), PVC (<i>w</i> = 32.2 %)	Na ⁺ , -2.09; K ⁺ , -0.74	SSM	0.01	0.01	55.5	–	<i>t</i> _{resp} = 30 s	[3]
NH₄⁺-5	NH₄⁺-5 (<i>w</i> = 1 %), DOA (<i>w</i> = 66.8 %), PVC (<i>w</i> = 32.2 %)	Na ⁺ , -0.06; K ⁺ , +0.58	SSM	0.01	0.01	45.0	–	<i>t</i> _{resp} = 30 s	[3]
NH₄⁺-6	NH₄⁺-6 (<i>w</i> = 69 %), PVC (<i>w</i> = 30 %), KTPCIPB (<i>x</i> _i = 0.6 %)	Li ⁺ , -1.3; Na ⁺ , -1.7; K ⁺ , -1.1; Rb ⁺ , -0.4; Cs ⁺ , +0.6; Mg ²⁺ , -2.8; Ca ²⁺ , -2.7; Sr ²⁺ , -2.9; Ba ²⁺ , -2.9	SSM	0.1	0.1	–	–		[8]
NH₄⁺-7	NH₄⁺-7 (<i>w</i> = 69 %), PVC (<i>w</i> = 30 %), KTPCIPB (<i>x</i> _i = 0.8 %)	Li ⁺ , -0.1; Na ⁺ , -0.9; K ⁺ , -0.6; Rb ⁺ , -0.5; Cs ⁺ , +0.1; Mg ²⁺ , -2.0; Ca ²⁺ , -2.0; Sr ²⁺ , -2.1; Ba ²⁺ , -2.2	SSM	0.1	0.1	–	–		[8]
NH₄⁺-8	NH₄⁺-8 (<i>w</i> = 69 %), PVC (<i>w</i> = 30 %), KTPCIPB (<i>x</i> _i = 0.9 %)	Li ⁺ , -1.6; Na ⁺ , -2.1; K ⁺ , -1.4; Rb ⁺ , -0.7; Cs ⁺ , +0.3; Mg ²⁺ , -3.0; Ca ²⁺ , -3.0; Sr ²⁺ , -2.9; Ba ²⁺ , -3.2	SSM	0.1	0.1	–	–		[8]
NH₄⁺-9	NH₄⁺-9 (<i>w</i> = 69 %), PVC (<i>w</i> = 30 %), KTPCIPB (<i>x</i> _i = 0.8 %)	Li ⁺ , -1.4; Na ⁺ , -1.8; K ⁺ , -1.4; Rb ⁺ , -1.0; Cs ⁺ , -0.3; Mg ²⁺ , -2.3; Ca ²⁺ , -2.2; Sr ²⁺ , -2.4; Ba ²⁺ , -2.5	SSM	0.1	0.1	–	–		[8]
NH₄⁺-10	NH₄⁺-10 (<i>w</i> = 69 %), PVC (<i>w</i> = 30 %),	Li ⁺ , -1.9; Na ⁺ , -2.3; K ⁺ , -1.7; Rb ⁺ , -1.4;	SSM	0.1	0.1	–	–		[8]

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Table 7: NH₄⁺- Selective Electrodes (Continued)

ionophore	membrane composition	$\lg K_{\text{NH}_4^+, \text{B}^n+}$	method	primary ion conc. (M)	interfering ion conc. (M)	slope decade	linear range (M)	remarks	ref.
	KTpCIPB ($x_1 = 0.9\%$)	Cs ⁺ , -0.1; Mg ²⁺ , -3.2; Ca ²⁺ , -3.4; Sr ²⁺ , -3.2; Ba ²⁺ , -3.4							
		Na ⁺ , -2.2; K ⁺ , -1.7	FIM	-	0.01	-	-		
NH₄⁺-11/	NH₄⁺-(11,12,13) (13:6:1 by weight)	Li ⁺ , -4.36; Na ⁺ , -2.36;	SSM	-	-	N	10 ⁻⁵ -10 ⁻¹	$t_{95} = 0.07-$	[16]
NH₄⁺-12/	($w = 5\%$), DBP ($w = 70\%$),	K ⁺ , -0.48; Rb ⁺ , -1.15;						1.5 s	
NH₄⁺-13	PVC ($w = 25\%$)	Cs ⁺ , -2.48							

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Table 7: NH_4^+ - Selective Electrodes (Continued)

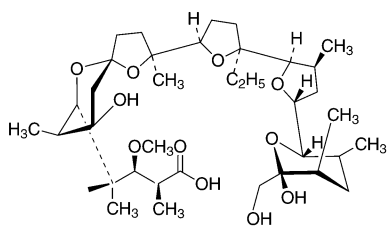
NH₄⁺-1 (nonactin, $M_r = 736.94$): R¹, R², R³, R⁴ = CH₃

NH₄⁺-2 (monactin, $M_r = 750.97$): R¹, R², R³ = CH₃; R⁴ = C₂H₅

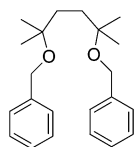
NH₄⁺-11 (dinactin, $M_r = 765.00$): R¹, R³ = CH₃; R², R⁴ = C₂H₅

NH₄⁺-12 (trinactin, $M_r = 779.03$): R¹ = CH₃; R², R³, R⁴ = C₂H₅

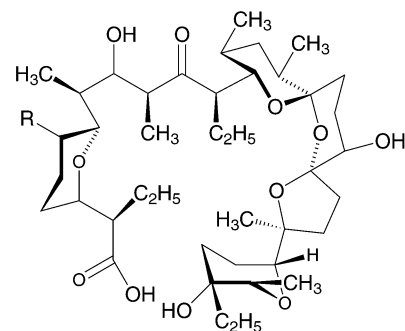
NH₄⁺-13 (tetranactin, $M_r = 793.06$): R¹, R², R³, R⁴ = C₂H₅



NH₄⁺-3 (monensin, $M_r = 670.89$)

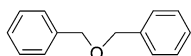


NH₄⁺-8 ($M_r = 326.22$)

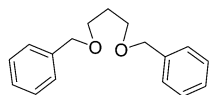


NH₄⁺-4 (salinomycin, $M_r = 753.02$): R = CH₃

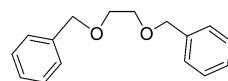
NH₄⁺-5 (narasin, $M_r = 739.00$): R = H



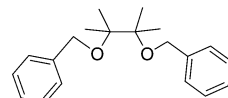
NH₄⁺-6 ($M_r = 198.26$)



NH₄⁺-7 ($M_r = 256.34$)



NH₄⁺-9 ($M_r = 242.32$)



NH₄⁺-10 ($M_r = 298.42$)