



Expected Ranges Chart / Cartilla de Rangos Esperados

ISE Analyzer	Na mmol/L			K mmol/L			Cl mmol/L			Ca mmol/L			Li ⁺ mmol/L			pH mmHg		
	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max
Diestro 103, 103+, 103A, 103AP	119.6	115.6	- 123.6	2.13	1.88	- 2.38	77.9	71.9	- 83.9	2.17	1.92	- 2.42	0.38	0.33	- 0.43	7.16	7.10	- 7.22

Blood Gas/ISE Analyzer	pH mmHg			pCO ₂ mmHg			pO ₂ mmHg			Na ⁺ mmol/L			K ⁺ mmol/L			Ca ⁺⁺ mmol/L			Ca ⁺⁺ mg/dL			Cl ⁻ mmol/L			Li ⁺ mmol/L			tCO ₂ mmol/L			
	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	
Abbott I-Stat BG, E+	7.196	7.139	- 7.253	83.4	73.7	- 93.1	116	102	- 134	119	108	- 125	1.90	1.63	- 2.06	1.86	1.60	- 2.11	7.42	6.40	- 8.44	88	81	- 96							
Alere EPOC	7.196	7.139	- 7.253	83.4	73.7	- 93.1	116	102	- 134	119	108	- 125	1.90	1.63	- 2.06	1.86	1.60	- 2.11	7.42	6.40	- 8.44	88	81	- 96							
Carelum XI-921	7.56	7.49	- 7.67							119	108	- 125	2.10	1.82	- 2.26	2.18	1.91	- 2.45	8.74	7.64	- 9.80	78	71	- 85							
CMD CMDLyte										109	98	- 115	1.91	1.63	- 2.07	1.93	1.66	- 2.20	7.72	6.64	- 8.80	77	70	- 84	0.38	0.34	- 0.42				
CMD CMDLyte Plus										114	103	- 120	2.19	1.91	- 2.35	2.15	1.88	- 2.42	8.60	7.52	- 9.68	75	68	- 82	0.31	0.27	- 0.35				
Convergent ISE/BG	7.16	7.11	- 7.22	75.5	65.5	- 85.5	115	105	- 131	115	104	- 121	1.93	1.65	- 2.09	2.01	1.68	- 2.34	8.02	6.72	- 9.36	79	72	- 86	0.31	0.27	- 0.39				
Cortmay Corlyte Analyzer										109	98	- 115	1.91	1.63	- 2.07	1.93	1.66	- 2.20	7.72	6.64	- 8.80	77	70	- 84	0.38	0.34	- 0.42				
Cornley AFT-400, 500 Series	7.04	6.98	- 7.09							116	105	- 122	2.11	1.84	- 2.26	2.54	2.28	- 2.80	10.16	9.12	- 11.20	75	67	- 82	0.38	0.34	- 0.42				
Diamond CARELYTE										117	106	- 123	2.04	1.76	- 2.20	1.80	1.51	- 2.09	7.20	6.04	- 8.36	84	77	- 91	0.39	0.35	- 0.43				
Diamond CARELYTE PLUS										119	108	- 125	2.18	1.90	- 2.34	2.07	1.78	- 2.36	8.28	7.12	- 9.44	84	77	- 91	0.39	0.35	- 0.43				
Diamond PROLYTE										110	99	- 116	1.98	1.70	- 2.30	*2.44	*2.17	- *2.71	*9.76	*8.68	- *10.84	74	67	- 81	0.41	0.37	- 0.45				
Diamond SMARTLYTE, GEMLYTE										109	98	- 115	1.91	1.63	- 2.07	1.93	1.66	- 2.20	7.72	6.64	- 8.80	77	70	- 84	0.38	0.34	- 0.42				
Diamond SMARTLYTE PLUS										114	103	- 120	2.19	1.91	- 2.35	2.15	1.88	- 2.42	8.60	7.52	- 9.68	75	68	- 82	0.31	0.27	- 0.35				
Diamond UNITY										111	100	- 117	1.76	1.48	- 1.92							71	64	- 78							
Erba Mannheim, EC 90										127	110	- 139	2.06	1.55	- 2.45	2.58	2.46	- 2.70	10.34	9.84	- 10.80	90	78	- 102							
Eschweiler Combiline	7.196	7.139	- 7.253	86.7	77.0	- 96.4	112	98	- 130	118	107	- 124	2.09	1.82	- 2.25	2.25	1.99	- 2.50	8.98	7.96	- 10.00	79	72	- 87	0.55	0.51	- 0.59				
Eschweiler Combisys II	7.199	7.142	- 7.256	81.7	72.0	- 91.4	114	100	- 132	118	107	- 124	2.09	1.82	- 2.25	2.25	1.99	- 2.50	8.98	7.96	- 10.00	81	74	- 89	0.55	0.51	- 0.59				
Eschweiler ECOLYTE										117	106	- 123	2.09	1.82	- 2.25	2.25	1.99	- 2.50	8.98	7.96	- 10.00	81	74	- 89	0.55	0.51	- 0.59				
Eschweiler ECOSYS II	7.201	7.144	- 7.258	81.7	72.0	- 91.4	114	100	- 132																						
Heigalyte Plus										114	103	- 120	2.19	1.91	- 2.35	2.15	1.88	- 2.42	8.60	7.52	- 9.68	75	68	- 82	0.31	0.27	- 0.35				
Horiba Yumizen E100										114	103	- 120	2.19	1.91	- 2.35	2.15	1.88	- 2.42	8.60	7.52	- 9.68	75	68	- 82	0.31	0.27	- 0.35				
IDEXX VetLyte										116	105	- 122	2.29	2.01	- 2.45							85	78	- 92							
IL 1600 Series	7.209	7.152	- 7.266	85.4	75.5	- 95.4	102	91	- 117	119	109	- 125	1.90	1.63	- 2.06	1.83	1.57	- 2.08	7.30	6.28	- 8.32	86	79	- 93							
IL BGE	7.196	7.139	- 7.253	83.4	73.7	- 93.1	104	92	- 119	118	108	- 124	1.80	1.54	- 1.95	1.85	1.59	- 2.10	7.38	6.36	- 8.40	86	79	- 93							
IL Gem Premier, 3000, 3500	7.180	7.123	- 7.237	75.5	66.5	- 85.5	126	115	- 143	115	104	- 121	1.89	1.62	- 2.05	1.99	1.73	- 2.25	7.96	6.92	- 9.00										
IL Gem Premier, 4000	7.179	7.122	- 7.236	71.5	62.5	- 81.5	123	112	- 140	113	102	- 119	2.03	1.75	- 2.19	2.01	1.75	- 2.27	8.02	7.00	- 9.08	80	73	- 87							
IL Gem Premier, 5000	7.120	7.063	- 7.177	63.9	54.9	- 73.9	119	108	- 136	113	102	- 119	1.82	1.54	- 1.98	2.18	1.92	- 2.44	8.72	7.68	- 9.76	79	72	- 86							
IL Lyte	7.195	7.138	- 7.252							120	109	- 126	2.05	1.77	- 2.22	2.30	1.97	- 2.62	9.18	7.88	- 10.48	82	76	- 89	0.35	0.32	- 0.38				
IL Synthesis 10, 15, 20, 25, 30, 35, 40, 45	7.196	7.139	- 7.253	79.9	70.6	- 89.2	104	93	- 120	120	109	- 125	1.87	1.60	- 2.02	1.87	1.62	- 2.12	7.46	6.48	- 8.48	86	79	- 93							
Inthema S-Lyte										109	98	- 115	1.91	1.63	- 2.07	1.93	1.66	- 2.20	7.72	6.64	- 8.80	77	70	- 84	0.38	0.34	- 0.42				
ITC IRMA TRUpoint	7.19	7.14	- 7.25	83.3	73.6	- 93.0	111	98	- 128																						
Max Ion	7.09	7.03	- 7.14							116	105	- 122	2.11	1.84	- 2.26	2.54	2.28	- 2.80	10.16	9.12	- 11.20	75	67	- 82	0.38	0.34	- 0.42				
Medica EasyBloodGas	7.16	7.11	- 7.22	77.5	67.5	- 87.5	113	103	- 129																						
Medica EasyElectrolytes										120	109	- 126	2.05	1.76	- 2.22	2.30	1.97	- 2.62	9.18	7.88	- 10.48	80	73	- 86	0.34	0.31	- 0.37				
Medica EasyLyte Na/K, Na/K/Cl, Na/K/Li, Na/K/Cl/Li, Na/K/pH/Ca	7.195	7.138	- 7.252							115	104	- 121	2.06	1.77	- 2.23	2.30	1.97	- 2.62	9.18	7.88	- 10.48	79	72	- 86	0.35	0.32	- 0.38				
Medica EasyStat	7.16	7.11	- 7.22	75.5	65.5	- 85.5	115	105	- 131	115	104	- 121	1.93	1.65	- 2.09	2.01	1.68	- 2.34	8.02	6.72	- 9.36	77	70	- 84							
Medica ISE Module										122	111	- 128	2.15	1.86	- 2.32	2.30	1.97	- 2.62	9.18	7.88	- 10.48	83	76	- 89	0.36	0.33	- 0.39				
MH Lab-ISE										109	98	- 115	1.91	1.63	- 2.07	1.93	1.66	- 2.20	7.72	6.64	- 8.80	77	70	- 84	0.38	0.34	- 0.42				
MH Lab-ISE Plus										114	103	- 120	2.19	1.91	- 2.35	2.15	1.88	- 2.42	8.60	7.52	- 9.68	75	68	- 82	0.31	0.27	- 0.35				
Nova Electrolyte Systems	7.216	7.159	- 7.273							120	109	- 126	2.10	1.81	- 2.27	2.42	2.07	- 2.76	9.66	8.28	- 11.04	87	80	- 94	0.36	0.33	- 0.40	29.3	25.3	- 33.3	
Nova Stat Profile Systems	7.226	7.169	- 7.283	82.4	72.8	- 92.0	107	95	- 123	119																					



Expected Ranges Chart / Cartilla de Rangos Esperados

ISE Analyzer	Na ⁺ mmol/L			K ⁺ mmol/L			Cl ⁻ mmol/L			Ca ⁺⁺ mmol/L			Li ⁺ mmol/L			pH mmHg		
	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max
Diestro 103, 103+, 103A, 103AP	138.4	134.4	- 142.4	4.27	3.87	- 4.67	96.1	91.1	- 101.1	1.19	1.09	- 1.29	1.00	0.83	- 1.17	7.35	7.29	- 7.41

Blood Gas/ISE Analyzer	pH mmHg			pCO ₂ mmHg			pO ₂ mmHg			Na ⁺ mmol/L			K ⁺ mmol/L			Ca ⁺⁺ mmol/L			Ca ⁺⁺ mg/dL			Cl ⁻ mmol/L			Li ⁺ mmol/L			tCO ₂ mmol/L			
	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	
Careline XI-921	7.59	7.50	- 7.68							143	136	- 150	4.54	4.20	- 4.88	1.12	0.95	- 1.29	4.47	3.80	- 5.16	96	88	- 104							
CMD CMDLye										137	130	- 144	4.21	3.87	- 4.55	1.12	0.95	- 1.29	4.48	3.80	- 5.16	99	91	- 107	1.05	0.92	- 1.18				
CMD CMDLye Plus										139	132	- 146	4.42	4.08	- 4.76	1.15	0.98	- 1.32	4.60	3.92	- 5.28	99	91	- 107	1.03	0.83	- 1.23				
Convergent ISE/BG	7.34	7.28	- 7.40	44.9	38.9	- 50.9	180	162	- 198	142	135	- 149	4.01	3.71	- 4.31	1.02	0.86	- 1.17	4.07	3.44	- 4.68	99	91	- 107	1.26	1.13	- 1.39				
Cormay Corlyte Analyzer										137	130	- 144	4.21	3.87	- 4.55	1.12	0.95	- 1.29	4.48	3.80	- 5.16	99	91	- 107	1.05	0.92	- 1.18				
Cornley AFT-400, 500 Series	7.17	7.11	- 7.23							140	133	- 147	4.34	4.01	- 4.68	1.15	0.99	- 1.31	4.61	3.96	- 5.24	97	89	- 106	0.95	0.82	- 1.09				
Diamond CARELYTE										145	138	- 152	4.54	4.20	- 4.88	1.12	0.95	- 1.29	4.46	3.80	- 5.16	106	97	- 114	1.05	0.92	- 1.18				
Diamond CARELYTE PLUS										144	138	- 152	4.37	4.03	- 4.71	1.11	0.94	- 1.28	4.44	3.76	- 5.12	105	96	- 113	1.03	0.90	- 1.16				
Diamond PROLYTE										138	130	- 145	4.41	3.97	- 4.85	*1.25	*1.09	- *1.41	*5.00	*4.36	- *5.64	98	90	- 106	1.13	1.00	- 1.26				
Diamond SMARTLYTE, GEMLYTE										137	130	- 144	4.21	3.87	- 4.55	1.12	0.95	- 1.29	4.48	3.80	- 5.16	99	91	- 107	1.03	0.90	- 1.16				
Diamond SMARTLYTE PLUS										139	132	- 146	4.42	4.08	- 4.76	1.15	0.98	- 1.32	4.60	3.92	- 5.28	99	91	- 107	1.03	0.83	- 1.23				
Diamond UNITY										139	132	- 146	4.36	4.02	- 4.70								101	93	- 109						
Erba Mannheim, EC 90										155	140	- 170	4.57	4.18	- 4.96	1.13	1.01	- 1.25	4.51	4.04	- 5.00	112	100	- 124							
Eschweiler Combline	7.319	7.260	- 7.378	36.5	30.5	- 42.4	182	164	- 200	146	140	- 153	4.45	4.12	- 4.79	1.15	0.98	- 1.31	4.59	3.92	- 5.24	105	97	- 114	1.08	0.95	- 1.21				
Eschweiler Combisys II	7.319	7.260	- 7.378	33.1	27.2	- 39.1	183	165	- 201	146	140	- 153	4.45	4.12	- 4.79	1.15	0.98	- 1.31	4.59	3.92	- 5.24	105	97	- 114	1.08	0.95	- 1.21				
Eschweiler ECOLYTE										144	138	- 151	4.45	4.12	- 4.79	1.15	0.98	- 1.31	4.59	3.92	- 5.24	105	97	- 114	1.08	0.95	- 1.21				
Eschweiler ECOSYS II	7.319	7.260	- 7.378	33.1	27.2	- 39.1	183	165	- 201																						
Heigalyte Plus										139	132	- 146	4.42	4.08	- 4.76	1.15	0.98	- 1.32	4.60	3.92	- 5.28	99	91	- 107	1.03	0.83	- 1.23				
Horiba Yumizen E100										139	132	- 146	4.42	4.08	- 4.76	1.15	0.98	- 1.32	4.60	3.92	- 5.28	99	91	- 107	1.03	0.83	- 1.23				
IDEXX VetLye										148	141	- 155	4.53	4.19	- 4.87							103	94	- 111							
IL 1610, 1620	7.296	7.237	- 7.355	48.2	42.2	- 54.1	154	137	- 171																						
IL 1630, 1640, 1650	7.296	7.237	- 7.355	48.2	42.2	- 54.1	153	135	- 170	142	136	- 149	4.01	3.70	- 4.32	1.09	0.93	- 1.26	4.37	3.72	- 5.04	101	93	- 109							
IL BGE	7.296	7.237	- 7.355	48.2	42.2	- 54.1	152	135	- 169	140	134	- 147	4.01	3.70	- 4.32	1.09	0.93	- 1.26	4.37	3.72	- 5.04	101	93	- 109							
IL Gem Premier, 3000, 3500	7.369	7.310	- 7.428	41.9	35.9	- 47.9	173	155	- 191	144	137	- 151	4.11	3.80	- 4.43	1.16	0.99	- 1.33	4.63	3.96	- 5.32										
IL Gem Premier, 4000	7.359	7.300	- 7.418	41.9	35.9	- 47.9	177	159	- 195	140	133	- 147	4.51	4.20	- 4.83	1.19	1.02	- 1.36	4.75	4.08	- 5.44	100	92	- 109							
IL Gem Premier, 5000	7.310	7.251	- 7.369	43.4	37.4	- 49.4	154	136	- 172	137	130	- 144	4.21	3.90	- 4.53	1.14	0.97	- 1.31	4.54	3.88	- 5.24	101	93	- 110							
IL Llyte	7.328	7.269	- 7.387							145	138	- 152	4.33	3.99	- 4.66	1.20	1.02	- 1.38	4.81	4.08	- 5.52	101	93	- 109	1.22	1.09	- 1.35				
IL Synthesis 10, 15, 20, 25, 30, 35, 40, 45	7.296	7.237	- 7.355	44.2	38.7	- 49.6	159	141	- 177	142	136	- 149	3.97	3.66	- 4.27	1.09	0.93	- 1.26	4.37	3.72	- 5.04	102	93	- 110							
Intherma S-Lyte										137	130	- 144	4.21	3.87	- 4.55	1.12	0.95	- 1.29	4.48	3.80	- 5.16	99	91	- 107	1.05	0.92	- 1.18				
ITC IRMA TRUpoint	7.32	7.26	- 7.38	47.8	41.9	- 53.7	162	143	- 181																						
Max Ion	7.17	7.11	- 7.23							140	133	- 147	4.34	4.00	- 4.67	1.15	0.99	- 1.31	4.29	3.96	- 5.32	97	89	- 106	0.95	0.82	- 1.09				
Medica EasyBloodGas	7.34	7.28	- 7.40	44.9	38.9	- 50.9	176	158	- 194																						
Medica EasyElectrolytes										147	140	- 154	4.33	3.99	- 4.66							102	94	- 110	1.21	1.08	- 1.34				
Medica EasyLye Na/K, Na/K/Cl, Na/K/Li, Na/K/Cl/Li, Na/K/pH/Ca	7.328	7.269	- 7.387							142	135	- 149	4.17	3.84	- 4.51	1.23	1.05	- 1.41	4.91	4.20	- 5.64	98	90	- 107	1.22	1.09	- 1.35				
Medica EasyStat	7.34	7.28	- 7.40	44.9	38.9	- 50.9	180	162	- 198	142	135	- 149	4.01	3.71	- 4.31	1.02	0.86	- 1.17	4.07	3.44	- 4.68	96	88	- 104	1.26	1.13	- 1.39				
Medica ISE Module										148	141	- 155	4.33	3.99	- 4.66							104	96	- 112	1.21	1.08	- 1.34				
MH Lab-ISE										137	130	- 144	4.21	3.87	- 4.55	1.12	0.95	- 1.29	4.48	3.80	- 5.16	99	91	- 107	1.05	0.92	- 1.18				
MH Lab-ISE Plus										139	132	- 146	4.42	4.08	- 4.76	1.15	0.98	- 1.32	4.60	3.92	- 5.28	99	91	- 107	1.03	0.83	- 1.23				
Nova Electrolyte Systems	7.306	7.247	- 7.356							144	137	- 151	4.31	3.98	- 4.64	1.05	0.89	- 1.21	4.21	3.56	- 4.84	101	93	- 110	1.19	1.06	- 1.32	40	36	- 44	
Nova Stat Profile Systems	7.306	7.247	- 7.356	48.2	42.2	- 54.1	149	132	- 165	143	137	- 150	4.31	3.98	- 4.64	1.05	0.89	- 1.21	4.21	3.56	- 4.84	101	93	- 109							
Nova pHox Series	7.354	7.329	- 7.379	38.7	33.7	- 43.8	169	163	- 175	141	137	- 145	4.34	4.09	- 4.59	1.08	1.00	- 1.16	4.33	4.00	- 4.64	93	89	- 98							
OptiMedical Opti 1	7.37	7.31	- 7.42	46.7	41.0	- 52.4	155	137	- 173																						
OptiMedical Opti CCA	7.37	7.31	- 7.42	47.7	41.8	- 53.6	153	136	- 170	146	139	- 153	4.35	4.01	- 4.69	1.00	0.85	- 1.16	4.01	3.40	- 4.64	105	96	- 113							
OptiMedical LION	7.33	7.26	- 7.39							139	136	- 142	4.35	4.01	- 4.69	1.00	0.85	- 1.16	4.01	3.40	- 4.64	105	93	- 116							
OptiMedical R	7.36	7.30	- 7.41	49.7	43.8	- 55.6	162	145	- 179	147	140	- 154	4.45	4.11	- 4.79	1.04	0.89	- 1.19	4.17	3.56	- 4.76										
Radiometer ABL 5	7.31	7.25	- 7.38	40.9	34.9	- 46.9	158	141	- 175																						
Radiometer ABL 50, 500, 505, 510, 520	7.310	7.251	- 7.369	41.5	36.5	- 46.5	179	160	- 198	141	135	- 148	4.20	3.86	- 4.54	1.09	0.93	- 1.26	4.37	3.72	- 5.04										
Radiometer ABL 555	7.307	7.248	- 7.366	41.9	35.9	- 47.9	177	159	- 195	146	13																				

