

4 Appendix and tables

4.2.4 pH values of various solutions at 20° C

Solution	Concentration			
	Normality	g/l	weight %	pH
Formic acid	0.1	4.6	0.46	2.3
Ammonia	1	17.0	1.7	11.6
Ammonia	0.1	1.7	0.17	11.1
Ammonia	0.01	0.17	0.02	10.6
Malic acid	0.1	6.7	0.67	2.2
Cider				2.9-3.3
Benzoic acid	0.01	1.2	0.12	3.1
Beér				4.0-5.0
Prussic acid	0.1	2.7	0.23	5.1
Borax	0.1	10.0	1	9.2
Boric acid	0.1	2.1	0.21	5.2
Ferric hydroxide	saturated			9.5
Acetic acid	1	60.0	6.0	2.4
Acetic acid	0.1	6.0	0.6	2.9
Acetic acid	0.01	0.6	0.06	3.4
Urine	saturated			4.8-8.4
Potassium hydroxide	1	56.0	5.4	14.0
Potassium hydroxide	0.1	5.6	0.58	13.0
Potassium hydroxide	0.01	0.56	0.06	12.0
Lime	saturated			12.4
Calcium carbonate				9.4
Calcium cyanate	0.1	6.5	0.65	11.0
Carbonic acid, saturated				3.8
Lemonade				2.0-4.0
Magnesium hydroxide	saturated			10.5
Milk				6.6-7.6
Lactic acid	0.1	9.0	0.90	2.4
Sodium bicarbonate	0.1	8.4	0.84	8.4
Sodium hydroxide	1	40.0	3.9	14.0
Sodium hydroxide	0.1	4.6	0.4	13.0
Sodium hydroxide	0.01	0.40	0.04	12.0
Sodium carbonate	0.1	5.3	0.53	11.6
Sodium phosphate	0.1	5.5	0.55	12.0
Sodium silicate	0.1	6.1	0.61	12.6
Oxalic acid	0.1	4.5	0.43	1.6
Phosphoric acid	0.1	3.3	0.33	1.5
Pure water				7.0
Hydrochloric acid	1	36.5	3.5	0.1
Hydrochloric acid	0.1	3.7	0.36	1.1
Hydrochloric acid	0.01	0.37	0.04	2
Sulphuric acid	1	49.0	4.8	0.3
Sulphuric acid	0.1	4.9	0.49	1.2
Sulphuric acid	0.01	0.49	0.05	2.1

Solution	Concentration			
	Normality	g/l	weight %	pH
Hydrogen sulphide	0.1	1.7	0.17	4.1
Sulphurous acid	0.1	4.1	0.41	1.5
Sea water				8.3
Wine				2.8 to 3.8
Wine vinegar				2.4 to 3.4
Tartaric acid	0.1	7.5	0.75	2.2
Citric acid	0.1	6.4	0.64	2.2