Child developmental psychology pdf

Standard buffer solutions are standard pH solutions. They are used for reference purposes in pH measurements and for many pharmacopeies that require adjustment or maintenance of the specified pH. They can be prepared by the methods described below. The preparation of special buffer solutions is described in sections in which their use is indicated both in the microbiological analysis of antibiotics and in individual monographs, which indicate the use of such solutions. Here are the reagents needed to prepare standard buffer solutions. All crystalline reagents, except boric acid, should be dried at 110 degrees to 120 degrees Celsius for 1 hour before use. Carbon-free water should be used to prepare buffer solutions, and where water is mentioned to prepare such solutions, the use of carbon-free water is implied. Prepared solutions should be stored in chemically resistant, glass bottles without alkaline glass and used for 3 months after cooking. Any decision that has become murky or shows any other evidence of deterioration should be discarded. Standard buffer solutions for different pH ranges from 1.2 to 10.0 can be prepared by appropriate combinations of hydronic acid 0.2 M or sodium hydroxide 0.2 M and the solutions described below, used in the proportions shown in the accompanying tables. The standard pH values in tables and in other parts of the application are considered to be playable within ± unit 0.02 at 25 degrees. Related: Different types of Titration 1. Boric acid and potassium chloride, 0.2 M: Dissolve 12,366 g of boric acid and 14,911 g potassium chloride in water and dilute with water to 1000 ml. 2. Sodium hydrogen phosphate, 0.2 M: Dissolve 71,630 grams of sodium hydrogen phosphate in water and dilute with water to 1000 ml. Hydrochloric acid, 0.2 M: Hydrochloric acid, diluted with water, contains 7,292 g HCl in 1000 ml. 4. Potassium chloride, 0.2 M: Dissolve 14,911 g potassium chloride in water and dilute with water to 1000 ml. Potassium dihydrogen phosphate, 0.2 M: Dissolve 27,218 g of potassium phosphate in water and dilute with water to 1000 ml. Potassium hydrogen phlath, 0.2 M: Dissolve 40,846 g hydrogen hydrogen phthalate in water and dilute with water to 1000 ml. Sodium hydroxide, 0.2 M: Dissolve sodium hydroxide in water to produce 40-60 percent w/v solution and let stand. Taking precautions to avoid absorbing carbon dioxide, siphon off clear supernathic liquid and dilute the carbon dioxide water, a suitable volume of liquid to contain 8.0 g of NaOH in 1000 ml NOTE - 0.2 M of sodium hydroxide should not be used later than a month after preparation. Hydrochloric acid buffer: Place 50ml potassium chloride 0.2 M in a 200ml volume flask, 0.2 M of salt acid (see table I) and then add water to the volume. Acid Phlaat buffer: Place 50.0 ml 0.2 M potassium hydrogen phthalate in 200ml bulk flask, add a specified volume of 0.2 M of salt acid (see table 2) and then add water to the volume. Neutralized Ettalat Buffer; Phlatat Buffer: Place 50.0 ml 0.2 M potassium hydrogen phlate in 200 ml bulk flask, add a specified volume of 0.2 M of sodium hydroxide (see table 3), and then add water to the

volume. Preparation for phosphate buffer solution: Place 50.0 ml 0.2 M of potassium dihydrogen phosphate in 200 ml of bulk flask, add a specified volume of sodium hydroxide 0.2 M (see table 4), and then add water to the volume. Alkaline borat buffer: Place 50.0 ml 0.2 M of boric acid and potassium chloride in 200 ml of bulk flask, add the specified volume of 0.2 M of sodium hydroxide (see table 5), and then add water to the volume. Other buffer solutions Acetate Buffer pH 2.8: Dissolve 4 g of acetate anhydrosis sodium in about 840 ml of water, Add enough glacial acetic acid to adjust the pH to 2.8 (about 155 ml) and dilute with water to 1000 ml. Acetate Buffer pH 3.4: Mix 50 ml 0.1 M of sodium acetate with 950 ml 0.1 M of acetic acid. Acetate Buffer pH 3.5: Dissolve 25g ammonium acetate in 25 ml water and add 38 ml 7 M of salinic acid. Adjust the pH to 3.5 M with 2 M of salt acid or 6 M of ammonia and dilute with water to 100 ml. Acetate buffer pH 3.7: Dissolve 10g of sodium anhydrose acetate in 300 ml of water, adjust pH to 3.7 with glacial acetic acid and dilute to 1000 ml. Before using adjust to pH 3.7, if necessary, with glacial vinegar acid or anatthatic sodium As needed. Buffer pH 4.0 acetate: Place 2.86 ml of glacial acetic acid and 1.0 ml 50 percent sodium hydroxide solution in 1000 ml of bulk flask, add water to the volume and mix. Adjust pH if necessary. Acetate Buffer pH 4.4: Dissolve 136 g of sodium acetate and 77 grams of ammonium acetate in water and dilute with water to 1000 ml. Add 250 ml of glacial acetic acid and stir. Acetate Buffer pH 4.6: Dissolve 5.4 g of sodium acetate in 50 ml of water, add 2.4 ml of glacial acetic acid and dilute with water to 100 ml. If necessary, adjust the pH. Acetate Buffer pH 4.7: Dissolve 8.4 g of sodium acetate and 3.35 ml of glacial acetic acid in enough water to produce 1000 ml. Acetate Buffer pH 5.0: Dissolve 13.6 g of sodium acetate and 6 ml of glacial acetic acid in enough water to produce 1000 ml. Acetate Buffer pH 5.5: Dissolve 272 grams of sodium acetate in 500 ml of water, heating up to 35, cool and add slowly 50 ml of glacial acetic acid and enough water to produce 1000 ml. If necessary, adjust the pH. Acetate Buffer pH 6.0: 100g ammonium acetate in 300ml water, add 4.1ml glacial acetic acid, adjust pH, if necessary, using 10M ammonia or 5 M of acetic acid and dilute with water to 500 ml. Acetate buffer solution: Dissolve 14 g potassium acetate and 20.5 ml of glacial acetic acid in enough water to produce 1000 ml. Acetate-Edetate Buffer pH 5.5: Dissolve 250 g of ammonium acetate and 15 g of sodium edetate in 400 ml of water and add 125 ml of glacial acetic acid to enough water to produce 1000 ml. Acetic acid-ammonium Acetate buffer: Dissolve 77.1g of ammonium acetate in water, add 57 ml of glacial acetic acid and dilute with water to 1000 Ml Acetic ammonia buffer pH 3.7, ethanol: up to 15 ml 5 m acetic acid add 60 ml of ethanol (95 percent) and 24 ml of water. Adjust the pH to 3.7 with ammonia 10 m and dilute with water to 100 ml. Solution of acetone, buffer: Dissolve 8. 15 g sodium acetate and 42 g sodium chloride in water, add 68 ml 0.1 M of salt acid and 150 ml of acetone and dilute with water to 500 ml. Albumin phosphate buffer solution pH 7.2; Phosphate-albumin buffered salt role 7.2: Dissolve 10.75g sodium hydrogen phosphate, 7.6 g of sodium chloride and 10 g of cattle in sufficient water to produce 1000 ml. Before using adjusted to rthr monstage 7.2 M of sodium hydroxide or 10 percent w/solution of phosphorus as required. Ammach-Ammonium chloride buffer: Dissolve 67.5 g of ammonium chloride in about 200 ml of water, Add 570 ml of strong ammonia solution and dilute with water to 1000 ml. Ammonia buffer pH 9.5: Dissolve 33.5 g of ammonium chloride in ISO ml of water, and 42 ml 10m ammonia and dilute with water to 250 ml. Store in plastic containers. Ammonia buffer pH 10.0: Dissolve 5.4g ammonium chloride in 20 ml of water, add 35ml 10M ammonia and dilute with water to 100ml. Ammonia buffer pH 10.9: Dissolve 67.5g of ammonium chloride in sufficient 10 M of ammonia to produce 1000 ml. Barbicon Buffer pH 7.4: Mix 50 ml solution containing 1.944 percent w/s sodium acetate and 2.946 percent w/in sodium barbite with 50.5 ml of salt acid 0.1 m, Add 20 ml solution of sodium chloride 8.5 percent w/b and dilute with water to 250 ml. Barbiton Buffer pH 8.6, Mixed; Barbicon Buffer pH 8.6: Dissolve 1.38g barbton, 8.76g sodium barbton and 0.38g calcium lactate in enough water to produce 1000ml Boric Buffer pH 9.0; Borat Buffer pH 9.0: Dissolve 6.20 g of boric acid in 500 ml of water, adjust to pH 9.0 with sodium hydroxide (about 41.5 ml) and dilute with water to 1000 ml. Buffer solution pH 2.5: Up to 25.0 ml 0.2 M potassium hydrogen phlate add 37.0 ml 0.1 m of salt acid and dilute enough water to produce 100.0 ml. Buffer (HEPES) pH solution 7.5: Dissolve 2.38 g of hydroxyethyl)piperazine-1ethanesulfon acid in approximately 90 ml of water. Adjust the pH to 7.5 with a solution Sodium. Sodium. up to 100ml with water. Carbonate buffer pH 9.7: Dissolve 8.4g sodium bicarbonate and 10.6 g of sodium carbonate in enough water to produce 500ml. Chloride Buffer pH 2.0: Dissolve 6.57 g potassium chloride in water, Add 119.0 ml 0.1 M of salt acid and dilute with water to 1000 ml. Citrat buffer: Dissolve 0.5 g of citric monohydrate and 0.4 g of sodium ophate dibasic in sufficient water to produce 1000 ml. Citro phosphate buffer pH 5.0: Mix 48.5 ml 0.1 M citric acid with enough 0.2 M of hydrogen phosphate sodium to produce 100 ml. Citro phosphate Buffer pH 6.0: Mix 36.8 ml of citric acid solution at 2.1 percent w/v with 63.2 ml 7.15 percent in/in sodium hydrogen phosphate solution. Citro-phosphate Buffer pH 7.0: Mix 17.6 ml 2.1 percent w/v citric acid solution with 82.4 ml 7.15 percent w/v sodium hydrogen phosphate solution. Cytrophosphate Buffer pH 7.2: Mix 13.0 ml 2.1 percent w/v citric acid solution with 87.0 ml 7.15 percent w/v sodium hydrogen phosphate solution. Citro-phosphate buffer solution pH 7.6: Dissolve 1.33 g of citric acid and 67.1 grams of sodium hydrogen phosphate in enough water to produce 1000 ml. Cuprick sulfate solution pH 2.0, Buffer: Mix 5.3 ml 0.2 M of salt acid and 25 ml potassium chloride 0.2 M, add 4 ml 0.393 percent in/in a solution of cupping sulfate and dilute to 100 ml of water. Kuprik sulfate solution pH 4.0, Buffer: Dissolve 0.25 g of sulfate and 4.5 g of ammonium acetate in sufficient water to produce 100 ml. Kuprik sulfate solution pH 5.2, buffer: Dissolve 1,522 g of hydrogen anhydrogenic phosphate in enough water to produce 53.6 ml and add 2.1 percent citric acid solution until the pH solution is between 5.15 and 5.25 (about 46 ml). Mix 98.5 ml of the resulting solution with 1.5 ml 0.393 percent sulfate solution. Ditanolamin Buffer pH 10.0: Dissolve 96.4 g of dietanolamin in sufficient water to produce 400 ml. Add 0.5 ml magnesium chloride solution 18.6% w/b, Adjust pH to 10.0 with 1 M of hydrochloric acid and dilute with water to 500 ml. Glycine Buffer pH 11.3: Mix a solution containing 0.75 percent w/v glycine and 0.58 percent of sodium chloride with an equal amount of sodium hydroxide 0.1 m. If necessary, adjust pN. Glycine buffer solution: Mix 42g of sodium bicarbonate and 50g of potassium bicarbonate with 180ml water and add a solution containing 37.5g of glycine and IS ml of strong ammonia in 180ml water. Dilute with water to 500 ml and stir until the solution is complete. Imidazole buffer pH 6.5: Dissolve 6.81 g imidazole and 1.23 g magnesium sulfate in 752 ml 0.1 M of saline acid, Adjust the pH if necessary and dilute with water to produce 1000 ml. Imidazole Buffer pH 7.4: Dissolve 3.40 g imidazole and 5.84 g chloride in water, and 18.6 ml 1 M of salt acid and dilute with water to produce 1000 ml Solution palladium chloride, buffer: Up to 0.5 g palladium chloride add 5 ml of salt acid and heat in a water bath. Add 200ml of hot water in small portions and continue to heat until the solution is complete. Cool and dilute with enough water to produce 250.0 ml. Up to 50.0 ml of the resulting solution add 10.0 ml 1 M of sodium acetate, 9.6 ml 1 M of sodium and enough water to produce 100.0 ml. phosphate-albumin buffered salt chlorin 7.2: Dissolve 10.75 g of sodium hydrogen phosphate, 7.6 g of sodium chloride and 10 g of cattle in water and dilute to 1000.0 ml with the same sodium chloride. Just before use, adjust the pH with a diluted sodium hydrogen solution or dilute the phosphoric acid. Phosphate Buffer pH 2.0: Dissolve 0.136 g of potassium dihydrogen phosphate in 800 ml of water, adjust pH to 2.0 with hydroic acid and add enough water to produce l000ml. Phosphate Buffer pH 2.5: Dissolve 100g potassium dihydrogen phosphate in 800 ml of water, adjust pH to 2.5 with hydroic acid and add enough water to produce l000ml. Phosphate Buffer pH 3.0: Dissolve 1.36 g potassium dihydrogen orthophosphate and 2 ml of triethylamine in 800 ml of water, adjust pH to 3.0 with orthophosphoric acid and add enough water to produce 1000 ml. Phosphate buffer pH 3.6: Dissolve 0.900 g of hydrogen angiosate phosphate and 1,298 g monohydrate citric acid in enough water to produce 1000 ml phosphate buffer pH 4.00 Mixed: Dissolve 5.04g of sodium hydrogen phosphate and 3.01g of dihydrogen potassium phosphate in sufficient water to produce 1000 ml. Adjust pH with glacial acetic acid. Phosphate buffer pH 4.9: Dissolve 40 g of sodium dihydrogen phosphate and 1.2 g of sodium hydroxide in enough water to produce 100 ml. If necessary, adjust pH with 1 M of sulphuric acid or 1 M of sodium hydroxide as needed. Phosphate Buffer pH 5.0: Dissolve 6.8g potassium dihydrogen phosphate per 1000 ml of water and adjust pH to 5.0 with potassium hydroxide 0 M. Phosphate Buffer pH 5.5, Mixed: SOLUTION I - Dissolve 13.61g potassium dihydrogen phosphate in enough water to produce 1000ml SOLUTION II - Dissolve 35.81g hydrogen desolation phosphate in sufficient water to produce 1000 ml. Mix 96.4 ml I solution with 3.6 ml. phosphate II phosphate phosphate : Dissolve 60.5 g of sodium hydrogen phosphate and 46 g of dihydrogen potassium phosphate in water, add 100 ml 0.02 ml of edentate deditria and 20 mg of mercury chloride and dilute with water to produce l000 ml. Phosphate Buffer pH 6.8, Mixed: Dissolve 28.20 g of sodium hydrogen phosphate and 11.45 g of dihydrogen potassium phosphate in sufficient water to produce 1000 ml phosphate Buffer pH , 0.2 M Mixed: Dissolve Dissolve d phosphate dihydrogen potassium and 35,084 grams of hydrogen phosphate sodium in enough water to produce 1000 ml. Store in a cold place. Phosphate Buffer pH 7.0, Mixed: Dissolve 0.50 g hydrogen phosphate anhydrous disodium 0.301 g phosphate of dihydrogen potassium in enough water to produce a phosphate buffer pH 7.0 with Azide, Mixed: Up to 1000 ml solution containing 1.8 percent w/v hydrogen phosphate sodium and 2.3 percent w/sodium chloride, add enough solution containing 0.78 percent of sodium dihydrogen phosphate and 2.3 percent w/sodium chloride (about 280 ml) to produce pH 7.0. Dissolve enough sodium asida in the resulting solution, to give solution 0.02 per cent w/v. Phosphate Buffer pH 7.0, 0.067 M Mixed: Dissolve 3.532 g phosphate potassium dihydrogen and 14.542 g of sodium hydrogen phosphate in sufficient water to produce 1000 ml phosphate buffer pH 7.0, 0.1 M Mixed; Buffer pH 7.0, 0.1 M: Dissolve 1,361 g potassium dihydrogen orthophosphate in enough water to produce 100 ml and adjust pH using 3.5 percent w/hydrogen solution orthophosphate hydrogen. Phosphate Buffer pH 7.5: Dissolve 6.8 g potassium dihydrogen ortophosphate and 1.56 g of sodium hydroxide in 900 ml of water adjust pH 7.5 with sodium hydroxide solution and dilute with water for production of 1000 ml. Phosphate Buffer pH 7.5, 0.2 M: Dissolve 27.2g of potassium dihydrogen phosphate with 930 ml of water to regulate pH 7.5 with 0.3 percent w/in a potassium hydroxide solution and add enough water to produce 1000 ml. 0.33 M Mixed: SOLUTION I - Dissolve 119.3 I g of sodium hydrogen phosphate in enough water to produce 1000 ml. SOLUTION II - Dissolve 45.36 g of potassium dihydrogen phosphate in sufficient water to produce 1000 ml. Mix 85 ml of solution I and 15 ml of Solution II and adjust the pH if necessary. Phosphate Buffer pH 8.0, 0.02 M: Mix 50 ml 0.2 M phosphate of dihydrogen potassium with 46.8 ml of sodium hydroxide 0.2 m and add enough water to produce 500 ml. Phosphate buffer, 0.025 M Standard: Dissolve 3.40 g potassium dihydrogen phosphate and 3.55 g hydrogen phosphate anhydrosis, Both previously dried at 110 -130 for 2 hours, in sufficient water to produce 1000 ml phosphate buffer, 0.05 M: Dissolve 6.8 g of potassium dihydrogen orthophosphate in sufficient water to produce l000ml. Salt, phosphate buffered: Dissolve 2.5 grams of sodium dihydrogen phosphate, 2,523 grams of sodium hydrogen phosphate and 8.2 grams of sodium chloride in enough water to produce 1000 ml. Salt role 6.4, phosphate-buffered: Dissolve 1.79g of deride hydrogen phosphate, 1.36 g potassium dihydrogen phosphate and 7.02 g of sodium chloride in sufficient water to produce 1000 ml. Salt role 7.4, phosphate buffer: Dissolve 2.38 g of hydrogen sodium 0.19 g potassium dihydrogen phosphate and 8.0 g of sodium chloride in enough water to produce 1000 ml. If necessary, adjust the pH. Tris Acetate Buffer pH 8.5: Dissolve 0.294 g calcium chloride and 12.11 g of tris (hydroxymethyl) aminethetan in water. Adjust the pH with 5 M of acetic acid and dilute to 1000.0 ml with water. Tris-Chloride Buffer pH 7.4: Dissolve 7.27 g tris (hydroxymethyl) methylamine and 5.27 g of sodium chloride if necessary, adjust pH and dilute with water to produce 1000 ml. Tris (hydroxymethyl) amineateant buffer pH 7.4: Dissolve 30.3 g of tris (hydroxymethyl) aminematetan in approximately 200 ml of water. Add 183 ml of i M. Salt acid to 500.0 ml NOTE - pH is 7.7-7.8 at room temperature and 7.4 at 37 degrees. This solution has been stable for several months at 4. Tris (hydroxymethyl) aminethitan buffer pH 8.1: Dissolve 2.9 g calcium chloride with 400 ml trices (hydroxymethyl) aminethaten solution, adjust pH with hydrochloric acid M and dilute with water to produce l000 ml. child developmental psychology jobs. child developmental psychology books. child developmental psychology degree. child developmental psychology research topics. child developmental psychology masters. child developmental psychology quizlet. child developmental psychology topics. child developmental psychology pdf