



C3.5.1 POTENTIOMETRIC AND ACID-BASE TITRATIONS

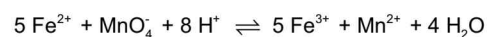
C3.5.1.3 Potentiometric titration of iron(II) ions

Potentiometric titration of iron(II) ions (C3.5.1.3)

Cat. No.	Description	C3.5.1.3
524 005W	Mobile-CASSY 2 WiFi	1
524 220	CASSY Lab 2	1
524 0672	pH adapter S	1
667 416	Single-rod redox probe BNC	1
ADA NBL124E	Analytical balance 120 g; 0,0001g, with USB interface	1
607 105	Magnetic stirrer mini	1
664 103	Beaker, DURAN, 250 ml, squat	2
300 42	Stand rod, 47 cm, 12 mm diam.	1
300 02	Stand base, V-shaped, small	1
665 997	Graduated pipette 10 ml	1
666 003	Pipetting ball (Peleus ball)	1
665 845	Burette, clear glass, 25 ml	1
665 816	Burette filling funnel plastic, 35 mm Ø	1
666 559	Burette clamp for 1 burette, roller clamp	1
666 543	Double, crossed boss head, 0...16 mm	2
666 551	Universal clamp 0...40 mm	2
671 9100	Iron(II) sulfate-7-hydrate, 100 g	1
672 7000	Potassium permanganate, 100 g	1
674 7920	Sulfuric acid, diluted, approx. 2 N (= 10 %), 500 ml	1
674 4670	Buffer solution pH 7.00, 250 ml	1
674 6900	Hydrochloric acid, 1 mol/l, 500 ml	1*
675 3500	Hydrogen peroxide, 30 %, 250 ml	1*
	additionally required: PC with Windows 7 or higher with WIFI or USB connection	1

* additionally recommended

In experiment C3.5.1.3, a potentiometric titration is performed in order to measure the concentration of iron(II) ions. In the process, the iron(II) ions are oxidised with potassium permanganate.



The change in the potential of the solution during the titration corresponds here to the change in pH in an acid-base titration.