Ti Application Note No. T- 27

Title:	**Alkalinity of amine-containing gas washing solutions**

***Summary*:**	Determination of the alkalinity of gas washing solutions containing alkanolamines by potentiometric titration with sulphuric acid using the combined glass electrode.

Sample:	Gas washing solutions containing alkanolamines, e.g. monoethanolamine (MEA), diglycolamine (DGA) or diisopropanolamine ADIP)

Sample Preparation:	none

Instruments and Accessories:	702, 716 or 736 Titrino or 726 Titroprocessor, 6.0219.100 combined glass electrode

Analysis:	Pour ca. 50 mL dist. water into a beaker, add 2 ... 3 g sample solution with a syringe (the exact sample mass is determined by back-weighing) and titrate with $c(H_2SO_4)$ = 0.05 mol/L (0.1 N) to an end-point at pH = 4.8.

Calculation:	% MEA = EP1 * C01 / C00 % DGA = EP1 * C02 / C00 % ADIP = EP1 * C03 / C00 EP1 = titrant consumption in mL C00 = sample weight in g C01 = 0.61 C02 = 1.05 C03 = 1.33

Remarks:	As the samples can also contain sulphides you have to use a special combined glass electrode whose bridge electrolyte has to be changed every day.