Ti Application Note No. T- 48

Title:	**Anionic surfactants in shower oil by potentiometric two-phase titration**

***Summary*:**	Determination of anionic surfactants in shower oil by potentiometric two-phase titration with TEGO®trant A100 using the Surfactrode Resistant.

Sample:	Cream shower oil (oil content 60%)

Sample Preparation:	none

Instruments and Accessories:	702, 716, 736 or 751 Titrino or 726 Titroprocessor, 727 Titration Stand, 722 Propeller Rod Stirrer, 6.0507.130 Surfactrode Resistant

Analysis:	Weigh ca. 0.15 g sample (precision 0.1 mg) into a beaker, then add 10 mL each of ethanol and methyl isobutyl ketone (MIBK), ca. 70 mL dist. water and 10 mL buffer pH = 3.0. Make sure that the stirring speed is high enough to mix the solution thoroughly and form a stable emulsion, then titrate with c(TEGO®trant A100) = 0.004 mol/L.

Calculation:	RS1: meq anionics / 100 g = EP1 * C01 * C02 / C00 RS2: % NaDDS = RS1 * C03 NaDDS = sodium dodecylsulphate (sodium lauryl sulphate) EP1 = titrant consumption in mL C00 = ca. 0.15 (sample mass in g) C01 = 0.004 (concentration of the titrant in mol/L) C02 = 100 (conversion factor) C03 = 0.2884 (M(NaDDS) / 1000 in g/mol)

Remarks:	Result: AVG(6) = 11.74 +/- 0.09 % NaDDS