



Thermo

ELECTRON CORPORATION

Potentiometric Titration Application Notes

Applications Log # 629

Overview The anionic surfactant in shampoo can be determined by the first derivative technique using the Orion Titrator PLUS and the Orion surfactant electrode with excellent reproducibility.

Industry	Cosmetics
Species Measured	Anionic Surfactant
Sample	Shampoo
Sample Size	1.0g
Typical Concentration	
Technique	# 6 First Derivative
Electrode	Surfactant electrode 9342BN. D-J Ref electrode 900200
Solutions	Inner/Outer Fill solution 900002, 810007. Hyamine 1622 654201. Na lauryl sulfate 654202
Sample Prep	Accurately weigh 1 g of shampoo and transfer the sample into a 500 mL volumetric flask. Add 10 drops of methanol and fill to mark with deionized water. Pipette 10 mL of diluted sample and add 50 mL of water into the same 200 mL beaker. The sample solution is ready for analysis.

Statistics

# of Trials	3	Mean	16.7%w/w	%CV	0.0
Analysis Time	5.7minute(s)				

Comments Rinse the electrodes, stirrer, and dispenser probe between measurements with deionized water.