



Thermo

ELECTRON CORPORATION

Potentiometric Titration Application Notes

Applications Log # 604

Overview The Anionic surfactant (DDBSA) in cleaner was determined by the first derivative technique using Orion 0.05 Hyamine 1622 standard as the titrant. The Orion 960 Autochemistry system determines the endpoint and calculates the sample concentration.

Industry	Detergent
Species Measured	Anionic Surfactant
Sample	Cleaner
Sample Size	2.0g
Typical Concentration	15% w/w
Technique	# 6 First Derivative
Electrode	Surfactant elect 9342BN. D-J Ref electrode 900200
Solutions	Inner/outer fill solution 900002, 810007. Hyamine 654201. Na lauryl sulfate 654202
Sample Prep	200mL flask: 2mL MeOH, sample, fill w/DI . Pipet 20mL add 90mL DI. And adjust pH to 10 w/ 0.1M NaOH. Titrate.

Statistics

# of Trials	3	Mean	14.50%w/w	%CV	0.69
Analysis Time	2.5minute(s)				
Comments	Rinse the electrodes, stirrer, and dispenser probe between measurements with deionized water.				