Thermo
ELECTRON CORPORATION

Potentiometric Titration Application Notes Applications Log # **563**

Overview The concentration of anionic surfactant was determined by the first derivative technique utilizing Hyamine 1622 as the titrant. The Orion 960 Autochemistry System determines the endpoint and calculates the sample concentrations.

Industry Chemical

Species Measured Anionic Surfactant

Sample Petroleum/Metal Cutting Drawing

Sample Size 4mL

Typical Concentration 8.00%

Technique # 6 First Derivative

Electrode Surfactant electrode 9342BN. D-J Ref electrode 900200

Solutions Ref electrode fill 810007-900002. Hyamine 654201. Triton 654203. 0.005M HCl rinse

Sample Prep Pipet 4 mL of sample into 150mL beaker. Dilute w/deionized water and then add 2mL triton. Titrate w/ hyamine.

Statistics

# of Trials	3	***Mean***	7.18	***%CV***	0.50

Analysis Time 6.9minute(s)

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