



Thermo

ELECTRON CORPORATION

Potentiometric Titration Application Notes

Applications Log # 524B

Overview The amine concentration is determined by titrating to Gran Predict endpoint with 0.1 M perchloric acid in glacial acetic acid. This method uses the Orion Ross combination pH electrode with a saturate solution of NaI in methanol as the filling solution.

Industry	Chemical
Species Measured	Amine
Sample	Ethylene Glycol
Sample Size	3.0g
Typical Concentration	0.7% w/w
Technique	# 10 Gran Predict
Electrode	Ross Combination pH 8172BN
Solutions	0.1M perchloric acid in glacial acetic acid; glacial acetic acid; NaI in methanol
Sample Prep	Weigh out 3 g of sample and add about 40 mL of glacial acetic acid. Sample is now ready for analysis.

Statistics

# of Trials	5	Mean	0.706%w/w	%CV	0.23
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Analysis Time 1.5minute(s)

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