

Application Memo

Industry	Inorganic chemical industry
Instrument	Automatic potentiometric titrator
Measurement method	Acid-base titration
Standards	

Nitric acid and hydrogen fluoride in detergent are measured by titration of acetone added diluted sample with 0.1mol/L potassium hydroxide + 2-propanol up to the endpoints, which are the maximum inflexion points on the titration curve. The acidity of nitric acid and hydrogen fluoride is calculated from the titration volume of potassium hydroxide + 2-propanol. Since dissociation constant of both nitric acid and hydrofluoric acid is large in solution, add acetone to differentiate H^+ ion between nitric acid and hydrogen fluoride so that the endpoints can be detected.

Main unit	Automatic potentiometric titrator (preamplifier STD)
Electrode	pH Glass electrode Ceramic reference electrode Temperature compensation electrode

Titrant