

Application Memo

Nitrogen in Surfactant

Industry	Inorganic chemical industry
Instrument	Automatic potentiometric titrator
Measurement method	Surfactant titration
Standards	

1. Overview

In this application, we demonstrate quantification of nitrogen in surfactant by using the particle changer detector unit (PCD-500) and the automatic potentiometric titrator. The test sample diluted with water is titrated with 0.004mol/L polyvinyl potassium sulfate, and the endpoint is determined from the sudden change of streaming potential at neutral point during titration. The nitrogen concentration is calculated from the titration volume up to the endpoint.

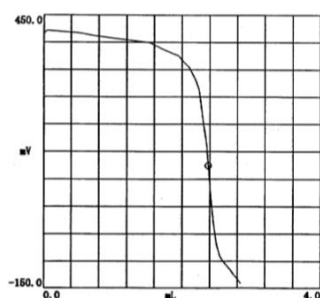
2. Apparatus

Main unit	Automatic potentiometric titrator (preamplifier STD) Particle changer detector unit (PCD-500)
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3. Reagents

Titrant	0.004mol/L polyvinyl potassium sulfate
Solvent	Distilled water

4. Example



—Titration curve—

—Measurement results—

	Sample (g)	Titer (mL)	Nitrogen (%)
1	0.8758	2.3934	0.153
2	0.8758	2.3804	0.152
3	0.8758	2.3770	0.152
Average			0.152
SD			0.001
RSD(%)			0.4

Please feel free to contact us for any further information.
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