

Application Memo

Distearate Dimethyl Ammonium Chloride in Hair Conditioner

Industry	Cosmetics soap
Instrument	Automatic potentiometric titrator
Measurement method	Colloidal titration
Standards	

1. Overview

Colloidal titration utilizes the quantitative reaction of anionic and cationic surfactant, which forms a nonionic surfactant complex. The endpoint is determined at the sudden change of streaming potential, so no indicator is necessary.

After adding 0.0005mol/L polyvinyl potassium sulfate (PVSK) to the diluted sample, it is back titrated with 0.0005mol/L chitosan methyl glycol. The concentration of distearate dimethyl ammonium chloride in the sample is calculated from the titration volume at the endpoint.

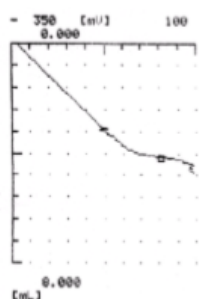
2. Apparatus

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

Titrant	0.0005mol/L chitosan methyl glycol
Solvent	Pure water
Additive	0.0005mol/L polyvinyl potassium sulfate (PVSK)

4. Example



—Titration curve—

—Measurement results—

	Sample (g)	Titer (mL)	Concentration (%)
1	1.1610	4.1761	1.5344
2	1.1610	4.1467	1.6085
3	1.1610	4.1295	1.6519
Average			1.5982
SD			0.0594
RSD(%)			3.72

Please feel free to contact us for any further information.

<Contact> Kyoto Electronics Manufacturing Co., Ltd.

Overseas Sales & Marketing Sect.

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