

Application Memo

Water Determination in Hydroxylamines(2) [Hydroxyl ammonium chloride]

Industry	:	Organic Chemical
Instrument	:	Karl Fischer Moisture Titrator
Measurement method	:	Volumetric Titration (Direct Method)
Standards	:	JIS 0113 ASTM E 203 ISO 760

1. Overview

The moisture in Hydroxyl ammonium amine can be determined by the Karl Fischer titration method (Volumetric) in accordance with “JIS K 0113 ('92) — General rules for methods of potentiometric, amperometric, coulometric, and Karl-Fischer titrators.”

Hydroxyl ammonium chloride can be dissolved in Methanol or the commercially available Dehydrating solvent ML with Salicylic acid added and measured for water content without any difficulties.

2. Apparatus

Main unit	:	Karl Fischer moisture titration volumetric system
Electrode	:	Twin platinum electrode for KF titration

3. Reagents

Titrant	:	Composite 2 (made by RdH)
Solvent	:	Dehydrating solvent MI (made by Hayashi) Salicylic acid

4. Example

— Measurement results —

Sample	Sample size (g)	Dehydrating solvent	Water content	
			mg	%
Hydroxyl ammonium chloride	1.03	50mL of Dehydrating solvent ML + 3g of Salicylic acid	0.67	0.07

Please feel free to contact us for any further information.

< Contact > Kyoto Electronics Manufacturing Co., Ltd.

Overseas Sales & Marketing Sect.

<http://www.kyoto-kem.com/en/contact/form.php>