

Application Memo

Water Determination in Hydroxylamines [Hydroxyl ammonium sulfate]

Industry	Organic chemical industry
Instrument	Karl Fischer moisture titrator
Measurement method	Volumetric titration (Direct Method)
Standards	JIS K 0113, ASTM E 203, ISO 760

1. Overview

Moisture titration with Karl Fischer reagent is the most reliable moisture measurement method in the world. The procedure is adopted in many official standards as test method specified in ISO, ASTM, DIN, BS and JIS.

Here in this application, we measure water content in hydroxyl ammonium amine by direct method of KF titration according to JIS K 0113. Hydroxyl ammonium amine can be dissolved in the solvent of a mixture of methanol and 2-propanol or the solvent and the water content can be measured without any difficulties. It is necessary to stir the sample enough in order to dissolve it in the solvent before titration.

2. Apparatus

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

3. Reagents

Titrant	HYDRANAL™ Composite 2
Solvent	HAYASHI™ Solvent MI

4. Example

—Measurement results—

Sample	Sample size (g)	Water content	
		(mg)	(%)
Hydroxyl ammonium sulfate	2.0229	0.2952	0.015

Please feel free to contact us for any further information.
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