

Application Memo

Moisture of Phenols (2)[Pyrogallol]

Industry	Petrochemicals
Instrument	Karl Fischer Moisture Titrator
Measurement method	Volumetric titration
Standards	JIS K 0113, ASTM E 203, ISO 760

1. Overview

Moisture titration using Karl Fischer reagent is popularly practiced water determination worldwide as the most reliable method. The procedure is adopted in many official standards as test method specified in ISO, ASTM, DIN, BS and JIS.

Here in this application, water content of one of the phenols (Pyrogallol) is determined by volumetric titration according to JIS K 0113-2005 as quoted below.

We use KEMAQUA MET or Methanol added with Salicylic acid as solvent. Without Salicylic acid added, Pyrogallol is acidified with Iodine and becomes pH dependent, thus the endpoint may not be detected.

2. Apparatus

Main unit	Karl Fischer moisture titration volumetric system
Electrode	Twin Platinum Electrode

3. Reagents

Titrant	KEMAQUA TR-5
Solvent	KEMAQUA Solvent MET for General
Additive	Salicylic acid

4. Example

—Measurement results—

Sample name	Sample size g	Extracting medium	Water content	
			Mg	%
Pyrogallol	0.2502	MET+ Salicylic acid	6.9339	2.77

Please feel free to contact us for any further information.
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