

## Application Memo

### Water Content of Nitrogen Compound (2)[Acid Amides]

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 as in ISO, ASTM and JIS, etc.

Here in this application note, we measure water content of acid amides according to JIS K 0113-2005 as quoted below. Among nitrogen compounds, most of acid amides are soluble in commercially sold extracting medium SA for this purpose.

We have tested so far the following substances:

N,N-dimethylformamide, N,N-dimethylacetamide, urea, etc.

## 2. Apparatus

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

## 3. Reagents

Titrant	KEMAQUA TR-3
Solvent	KEMAQUA Solvent SA for Sugar

## 4. Example

### —Measurement results—

Sample name	Water content	
	Mg	%
N,N-dimethylformamide	4.3654	0.046
N,N-dimethylacetamide	0.4414	0.005
Urea	0.7363	0.066

Please feel free to contact us for any further information.

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