

## Application Memo

# Mercaptan of Toluene

Industry	Organic chemical industry
Instrument	Automatic potentiometric titrator
Measurement method	Precipitation titration
Standards	JIS K 0070

## 1. Overview

Mercaptan in toluene is quantified by adding 2-propanol and 0.1mol/L sodium acetate (ethanol) to the sample liquid followed by titration 0.025mol/L silver nitrate2-propanol. The endpoint is the maximum inflexion on the titration curve.

The concentration of mercaptan is calculated from the titration volume of silver nitrate.

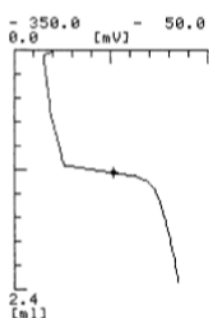
## 2. Apparatus

Main unit	Automatic potentiometric titrator (preamplifier STD)
Electrode	Silver electrode Mercury sulfate reference electrode

## 3. Reagents

Titrant	0.025mol/L silver nitrate 2-propanol
Solvent	2-propanol
Additive	0.1mol/L sodium acetate (ethanol solution)

## 4. Example



—Titration curve—

—Measurement results—

	Sample (mL)	Titer (mL)	Mercaptan (ppm)
1	20.0	1.2453	49.91
2	20.0	1.2365	49.55
3	20.0	1.2357	49.52
Average			49.66
SD			0.21
RSD(%)			0.43

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