

Application Memo

Free Nitric Acid Concentration in Desmutting Solution

Industry	Non-ferrous metal
Instrument	Automatic potentiometric titrator
Measurement method	Acid-base titration
Standards	

1. Overview

After adding 10W/V% potassium fluoride to the diluted sample, it is titrated with 1mol/L sodium hydroxide solution. The endpoint is the maximum inflexion on the titration curve. The free nitric acid concentration is calculated from the titration volume of the sodium hydroxide solution.

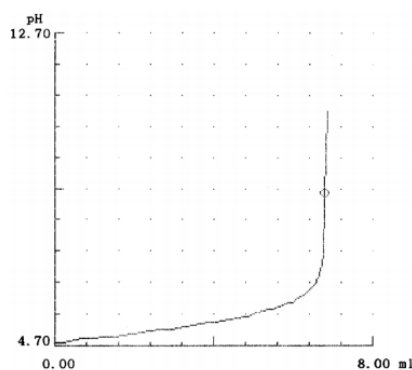
2. Apparatus

Main unit	Automatic potentiometric titrator (preamplifier STD)
Electrode	pH glass electrode Ceramic reference electrode

3. Reagents

Titrant	1mol/L sodium hydroxide solution
Reference	Pure water
Reagents	10W/V% potassium fluoride

4. Example



-Titration curve-

	Sample (g)	Conc. (g/L)
1	5	87.06
2	5	86.32
3	5	86.45
Average		86.61
SD		0.40
RSD(%)		0.46

Please feel free to contact us for any further information.
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