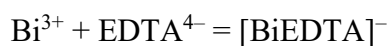


## Determination of Bi(III) by complexometric titration

The ionic equation of the determination is ( $0.8 < \text{pH} < 2.5$ ):



*Description:* An individual sample of Bi(III) will be given in a vial. Transfer the sample without loss into a 100.00 cm<sup>3</sup> volumetric flask, add 10 cm<sup>3</sup> 10% (w/w) nitric acid and the fill up the flask with distilled water up to the mark. Shake this stock solution well, then put 10.00 cm<sup>3</sup> of the stock solution into a 100 cm<sup>3</sup> titration flask using a pipette. Add 1-4 drops of xylenol orange indicator, and titrate it with the Na<sub>2</sub>EDTA titrant of known concentration until its color becomes permanent yellow.

Molar weight of Bi: 209.00 g/mol