

### Contents

	Foreword
	Introduction
1	Scope
2	Normative references
3	Terms and definitions
4	Principle
5	Reagents and materials
5.1	Solvents and reagents
5.2	Cleaning liquids
6	Apparatus
7	Preparation of test samples
7.1	General
7.2	Samples containing less than 98 % (by mass) polyamide
8	Calculation of test portion
9	Selection of solvent
10	Procedure
10.1	Cleaning of the viscometer
10.2	Preparation of test solution
10.2.1	General
10.2.2	Volumetric method
10.2.3	Volumetric method, in exact relation to the polymer content
10.2.4	Gravimetric method, in exact relation to the polymer content
10.3	Measurement of flow times
11	Expression of results
12	Repeatability and reproducibility
13	Relationship between the viscosity number determined in 96 % (by mass) sulfuric acid solution and the viscosity determined in various solvents
14	Test report
Annex A	(informative) Determination of the concentration of commercial sulfuric acid(95 % to 98 %) and adjustment to 96 % by titration
A.1	General
A.2	Apparatus and reagents
A.3	Procedure
A.3.1	Check on the titre of hydrochloric acid
A.3.2	Preparation of sodium hydroxide solution, 1 mol/l
A.3.3	Determination of the titre of sodium hydroxide solution
A.3.4	Determination of the titre of initial sulfuric acid solution
A.4	Expression of results

- A.5 Adjustment of sulfuric acid concentration
  - A.5.1 Concentration of sulfuric acid solution lower than 96 %
  - A.5.2 Concentration of sulfuric acid solution higher than 96 %
- Annex B (informative) Determination of the concentration of sulfuric acid (95 % to 98 %) and adjustment to 96 % by flow time measurement in a small capillary viscometer
  - B.1 General
  - B.2 Apparatus
  - B.3 Preparation of calibration curve
  - B.4 Adjustment of sulfuric acid concentration
    - B.4.1 Concentration of sulfuric acid solution lower than 96 %
    - B.4.2 Concentration of sulfuric acid solution higher than 96 %
- Annex C (informative) Determination of the concentration of commercial formic acid and adjustment to 90 % by titration
  - C.1 General
  - C.2 Apparatus and reagents
  - C.3 Procedure
    - C.3.1 Determination of the titre of the sodium hydroxide solution
    - C.3.2 Determination of the formic acid concentration
  - C.4 Adjustment of formic acid concentration
- Annex D (informative) Determination of the concentration of commercial formic acid and adjustment to 90 % by density measurement
  - D.1 General
  - D.2 Apparatus
  - D.3 Procedure
- Annex E (informative) Relationship between the viscosity number determined in 96 % (by mass) sulfuric acid solution and the viscosity determined in various solvents
  - E.1 Relationship between the viscosity numbers determined in 96 % (by mass) sulfuric acid, 90 % (by mass) formic acid and m#cresol
    - E.1.1 Viscosity numbers in 96 % (by mass) sulfuric acid and 90 % (by mass) formic acid, respectively
    - E.1.2 Viscosity numbers in 96 % (by mass) sulfuric acid and m#cresol, respectively
    - E.1.3 Precision
  - E.2 Relative viscosities determined in accordance with ASTM D789 and viscosity numbers determined in 96 % (by mass) sulfuric acid
  - E.3 Interconversion of relative viscosity (JIS K 6920-2:2009, Annex JA) and viscosity number for PA 6 and PA 66 (this document)
  - E.4 Interconversion of relative viscosity in 95,7 % (by mass) sulfuric acid at a concentration of 0,01 g/ml and viscosity number for PA 6 and PA 66 (this document)

Page count: 35