
**Fine ceramics (advanced ceramics,
advanced technical ceramics) —
Measurement of thixotropic behaviour
of ceramic slurry by use of a rotational
viscometer**

Céramiques techniques (céramiques avancées, céramiques techniques avancées) — Mesurage du comportement thixotropique d'une barbotine de céramique à l'aide d'un viscosimètre rotatif





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Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Principle	2
4.1 Evaluation of thixotropic behaviour by hysteresis measurement of flow curve	2
4.2 Evaluation of thixotropic behaviour by time-dependence of shear stress at constant low shear rate	2
5 Apparatus	2
5.1 Measuring system	2
5.2 Basic capacity of the instrument	2
5.3 Calibration of rotational viscometer	3
5.4 Temperature control device	3
6 Pretreatment of the slurry samples	3
6.1 General	3
6.2 Degassing	3
6.3 Dispersion by stirring, mixing and ultrasonication	3
7 Measurement condition	3
7.1 Setting of ceramic slurry to rotational viscometer	3
7.2 Temperature	3
8 Measurement procedure	4
8.1 Measurement of thixotropic behaviour by hysteresis measurement of flow curve	4
8.1.1 Condition of shear rate and setting of measurement range	4
8.1.2 Measurement procedure	4
8.1.3 Analysis method of measurement results	4
8.2 Measurement of thixotropic behaviour by time-dependence of shear stress at constant low shear rate	5
8.2.1 Setting of measurement programme	5
8.2.2 Measurement procedure	5
8.2.3 Analysis method of measurement results	5
9 Test report	6
Bibliography	8

Foreword

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This document was prepared by Technical Committee ISO/TC 206, *Fine ceramics*.

Fine ceramics (advanced ceramics, advanced technical ceramics) — Measurement of thixotropic behaviour of ceramic slurry by use of a rotational viscometer

1 Scope

This document specifies a method for measurement of thixotropic behaviour of ceramic slurry with rotational viscometer. The slurry with high-solid loading, which is used in ceramic manufacturing, has a generally non-Newtonian property. This method is limited to measurement of thixotropic behaviour of high-solid loaded ceramic slurry with “coaxial double cylinder viscometer”, “cone and plate viscometer” and “a parallel plate viscometer” as rotational viscometers.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

3.1

shear stress

force developed on the plane which is perpendicular to the shear force when there is shear applied to the fluid

3.2

shear rate

proportion of laminar flow rate change perpendicular to the fluid flow

3.3

Newtonian property

slurry property of which the shear stress is proportional to the shear rate

3.4

non-Newtonian property

slurry property of which the shear stress is not proportional to the shear rate

3.5

viscosity

proportion of shear stress and shear rate

Note 1 to entry: The proportion is a representation of resistance to flow.

3.6

flow curve

curve showing the relationship between shear rate and shear stress