
**Fine ceramics (advanced ceramics,
advanced technical ceramics) — Sample
preparation for the determination of particle
size distribution of ceramic powders**

*Céramiques techniques — Préparation de l'échantillon pour la
détermination de la répartition granulométrique des poudres céramiques*



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ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 734 10 79
E-mail copyright@iso.ch
Web www.iso.ch

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 14703 was prepared by Technical Committee ISO/TC 206, *Fine ceramics*.

Fine ceramics (advanced ceramics, advanced technical ceramics) — Sample preparation for the determination of particle size distribution of ceramic powders

1 Scope

This International Standard establishes a general wet sample preparation technique common to the size analysis of powdered fine ceramic materials. The analyzed size distribution of fine particles is strongly dependent on the sample preparation.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 3696:1987, *Water for analytical laboratory use — Specification and test methods*.

ISO 8213:1986, *Chemical products for industrial use Sampling techniques — Solid chemical products in the form of particles varying from powders to coarse lumps*.

3 Terms and definitions

For the purpose of this International Standard, the following terms and definitions apply.

3.1

fine particles

particles of whose sizes are less than a few micrometres

3.2

sample preparation

process that includes deagglomeration, dispersion of a test sample and treatment of suspension in stages up to taking the test portion

3.3

test sample

representative part taken from a quantity of material

3.4

test portion

quantity of material taken from the test sample entirely used in the test