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# Reference materials for particle size measurement — Specification of requirements

# National foreword

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# Reference materials for particle size measurement — Specification of requirements

*Matériaux de référence pour la mesure de taille de particules — Spécification des exigences*

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# Foreword

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This document was prepared by Technical Committee ISO/TC 24, *Particle characterization including sieving*, Subcommittee SC 4, *Particle characterization.*

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.


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**TECHNICAL SPECIFICATION** **ISO/TS 4807:2022**

# Reference materials for particle size measurement — Specification of requirements

## 1 Scope

This document is intended to support users of reference materials (RMs) for particle size analysis to identify suitable RMs (certified or not) for their needs. In line with the focus on users, questions on sample preparation that go beyond preparation of the sample as received by the user will not be covered by this document.

This document describes the fundamental requirements that RMs (certified or not) for the determination of particle size shall fulfil in order to be fit for a given purpose. The document is limited to a description of the fundamental principles – the discussion whether a certain numerical value is fit for purpose is beyond the scope of this document.

The scope of this document is limited to RMs (certified or not) in the form of particles. This document does not deal with any other form of RMs, like calibration grids.

## 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 terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

**3.1**
**kind of quantity**
aspect common to mutually comparable quantities

Note 1 to entry: The division of 'quantity' according to 'kind of quantity' is to some extent arbitrary.

EXAMPLE The quantities diameter, circumference, and wavelength are generally considered to be quantities of the same kind, namely of the kind of quantity called length.

Note 2 to entry: Quantities of the same kind within a given system of quantities have the same quantity dimension. However, quantities of the same dimension are not necessarily of the same kind.

[SOURCE: ISO/IEC Guide 99:2007, 1.2, modified — Note 3 to entry and EXAMPLES 2 and 3 have been deleted.]

**3.2**
**measurand**
quantity intended to be measured

Note 1 to entry: The specification of a measurand requires knowledge of the *kind of quantity* (3.1), description of the state of the phenomenon, body, or substance carrying the quantity, including any relevant component, and the chemical entities involved.

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