

DIN ISO 22197-1



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Supersedes
DIN ISO 22197-1:2016-04

**Fine ceramics (advanced ceramics, advanced technical ceramics) –
Test method for air-purification performance of semiconducting
photocatalytic materials –
Part 1: Removal of nitric oxide (ISO 22197-1:2016),
English translation of DIN ISO 22197-1:2018-12**

Hochleistungskeramik –
Prüfverfahren zur Bestimmung des Luftreinigungsvermögens von halbleitenden
photokatalytischen Werkstoffen –
Teil 1: Entfernung von Stickstoffmonoxid (ISO 22197-1:2016),
Englische Übersetzung von DIN ISO 22197-1:2018-12

Céramiques techniques –
Méthodes d'essai relatives à la performance des matériaux photocatalytiques
semi-conducteurs pour la purification de l'air –
Partie 1: Élimination de l'oxyde nitrique (ISO 22197-1:2016),
Traduction anglaise de DIN ISO 22197-1:2018-12

Document comprises 18 pages

Translation by DIN-Sprachendienst.

In case of doubt, the German-language original shall be considered authoritative.

A comma is used as the decimal marker.

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National foreword

This document (ISO 22197-1:2016) has been prepared by Technical Committee ISO/TC 206 “Fine ceramics” (Secretariat: JISC, Japan).

The responsible German body involved in its preparation was *DIN-Normenausschuss Materialprüfung* (DIN Standards Committee Materials Testing), Working Committee NA 062-02-93 AA “Photocatalysis”.

The DIN documents corresponding to the international documents referred to in this document are as follows:

ISO 4892-1	DIN EN ISO 4892-1
ISO 4892-3	DIN EN ISO 4892-3
ISO 5725-2	DIN ISO 5725-2
ISO 6145-7	DIN EN ISO 6145-7
ISO 7996	DIN ISO 7996*)
ISO 10304-1	DIN EN ISO 10304-1
ISO 10523	DIN EN ISO 10523
ISO 80000-1	DIN EN ISO 80000-1
ISO/IEC 17025	DIN EN ISO/IEC 17025

ISO 22197 consists of the following parts, under the general title *Fine ceramics (advanced ceramics, advanced technical ceramics)* — *Test method for air-purification performance of semiconducting photocatalytic materials*:

- *Part 1: Removal of nitric oxide*
- *Part 2: Removal of acetaldehyde*
- *Part 3: Removal of toluene*
- *Part 4: Removal of formaldehyde*
- *Part 5: Removal of methyl mercaptan*

Amendments

This standard differs from DIN ISO 22197-1:2016-04 as follows:

- a) the reference to ISO 4677-1 (withdrawn) has been deleted in Clause 2 and subclause 8.2.2;
- b) a definition for “dark condition” (3.7) has been added;
- c) the measurement of the air-flow rate for wet air has been amended (6.2);
- d) in Clause 7, the tolerances of the test piece have been amended;

*) Withdrawn without replacement in 2006-11-01.

- e) in Clause 8, the procedure has been updated to reflect the state of the art;
- f) a test method for test pieces with lower performance has been added (new Clause 10);
- g) the standard has been editorially revised.

Previous editions

DIN ISO 22197-1: 2016-04

National Annex NA
(informative)

Bibliography

DIN EN ISO 4892-1, *Plastics — Methods of exposure to laboratory light sources — Part 1: General guidance*

DIN EN ISO 4892-3, *Plastics — Methods of exposure to laboratory light sources — Part 3: Fluorescent UV lamps*

DIN EN ISO 6145-7, *Gas analysis — Preparation of calibration gas mixtures using dynamic volumetric methods — Part 7: Thermal mass-flow controllers*

DIN EN ISO 10304-1, *Water quality — Determination of dissolved anions by liquid chromatography of ions — Part 1: Determination of bromide, chloride, fluoride, nitrate, nitrite, phosphate and sulfate*

DIN EN ISO 10523, *Water quality — Determination of pH*

DIN EN ISO 80000-1, *Quantities and units — Part 1: General*

DIN EN ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories*

DIN ISO 5725-2, *Accuracy (trueness and precision) of measurement methods and results — Part 2: Basic method for the determination of repeatability and reproducibility of a standard measurement method*

DIN ISO 7996, *Ambient air — determination of the mass concentration of nitrogen oxides — chemiluminescence method*