

# ISO 22197-1:2016-11 (E)

## Fine ceramics (advanced ceramics, advanced technical ceramics) - Test method for air-purification performance of semiconducting photocatalytic materials - Part 1: Removal of nitric oxide

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
1	Scope .....	1
2	Normative references .....	1
3	Terms and definitions .....	2
4	Symbols .....	2
5	Principle .....	3
6	Apparatus .....	3
6.1	Test equipment .....	3
6.2	Test gas supply .....	3
6.3	Photoreactor .....	6
6.4	Light source .....	6
6.5	Analyser of pollutants .....	6
7	Test piece .....	6
8	Procedure .....	6
8.1	Pretreatment of test piece .....	6
8.2	Pollutant-removal test .....	7
8.3	Elution test .....	8
9	Calculation .....	8
9.1	Calculation method .....	8
9.2	Amount of NO <sub>x</sub> adsorption by the test piece .....	9
9.3	Amount of NO removed by the test piece .....	9
9.4	Amount of NO <sub>2</sub> formed by the test piece .....	9
9.5	Amount of NO <sub>x</sub> desorbed from the test piece .....	10
9.6	Net amount of NO <sub>x</sub> removed by the test piece .....	10
9.7	Nitrogen eluted from the test piece .....	10
9.8	Recovery of washing with water .....	11
10	Test method for test pieces with lower performance .....	11
11	Test report .....	11
Annex A (informative)	Results of round-robin test .....	12
Bibliography .....		13