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Indoor air —

Part 37:

Measurement of PM_{2,5} mass concentration

Air intérieur —

Partie 37: Mesure de la concentration massique en PM_{2,5}



ISO 16000-37:2019(E)

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Contents		
Fore	eword	iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	
4	Abbreviated terms	
5	Measurement strategy for determing PM _{2,5} indoors 5.1 Location and number of sampling points 5.2 Measurement strategy for source attribution 5.3 Indoor air condition	
6	Principle of measurement 6.1 General considerations 6.2 Description of the standard measuring principle	4
7	Equipment and facilities 7.1 Sampling system components 7.2 Weighing facilities and procedure	5
8	Supplementary high time resolution method 8.1 General 8.2 Selection of the supplementary instrument 8.3 Supplementary procedure	5 6
9	Evaluation and reporting the results	6
10	Quality assurance and uncertainty evaluation 10.1 Reference method 10.1.1 General 10.1.2 Flow control system 10.1.3 Weighing system 10.1.4 Checking the equipment's parameters 10.2 Supplementary methods	
Ann	ex A (informative) Examples of particle concentrations encountered during	
	activities	
Bibl	iography	11

Foreword

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Introduction

Airborne particulate matter (colloquially known as "fine dust") plays a role not only outdoors, but is also significant in terms of hygiene, especially indoors. People in industrialized countries spend most of the day indoors. Either particles are transported into indoor air from outdoor environments or the particles directly result from indoor sources, such as smoking, residential wood burning and cooking.

 $PM_{2,5}$ concentration and composition in indoor environments strongly depend on parameters such as the room size, relative humidity, air exchange rate, airflow conditions and sink effects on surfaces (e.g. walls, ceilings, floor coverings, furnishings). In addition, particles already sedimented are temporarily resuspended to the air through various activities and can be inhaled. All this can result in highly variable levels of indoor $PM_{2,5}$ pollution that are not easily ascertained or assessed in terms of their impacts on health.

This document describes the general strategies for the measurement of indoor $PM_{2,5}$ concentration.

This document was prepared in response to the need for improved comparability of methods for particle measurement.