

Chapter

1. Asbestos Exposure Assessment, Risk Identification, and Substitutes

Section

B. Asbestos Exposure Assessment and Control in Occupational Settings

No./Title

**a-11. Standard practice for sampling and counting airborne fibers, including asbestos fibers, in the workplace, by phase contrast microscopy (PCM; with the option of transmission electron microscopy; TEM)**

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American Society for Testing and Materials (ASTM)

Bibliographic ID

ASTM D7201-06. 2006

## Introduction

Asian context

Introducing the PCM-based method followed by the TEM-based method for the counting of PCME fibers is the most widely used technique to determine the concentration of airborne asbestos in occupational settings. This method gives a good example of the combination of these two methods.

Critical appraisal

This method provides specified and detailed procedures for the analysis of airborne fibers with PCM and TEM that is similar to the NIOSH 7400 and 7402 methods.

Unique keywords

Abstract

**Background:** This method, issued by the ASTM, provides a detailed procedure for determining the concentration of fibers using PCM and optionally TEM to evaluate particulate material collected on a membrane filter in the breathing zone of an individual or by area sampling in a specific location.

**Objective:** The method is defined for cellulose ester (either mixed esters of cellulose or cellulose nitrate) filters, housed in a conductive polypropylene cassette, through which a known volume of air has been drawn. Countable asbestos fibers are defined as asbestos structures with length >5 µm, width >0.2 µm and aspect ratio (length: width ratio) >3:1.



No available PDF

## Annotation

Fact 1

- Annotation is not provided for this factsheet.

Fact 2



Fact 3



Fact 4



Fact 5



## References