

Chapter

1. Asbestos Exposure Assessment, Risk Identification, and Substitutes

Section

B. Asbestos Exposure Assessment and Control in Occupational Settings

No./Title

a-2. Asbestos and other fibers by PCM. NMAM 7400

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National Institute of Occupational Safety and Health (NIOSH)

Bibliographic ID

Manual of Analytical Methods (NMAM) 4th ed. DHHS (NIOSH) Publication Aug 1994

Introduction

Asian context

The NIOSH 7400 method is one of the representative PCM-based methods which can be taken into account as a national standard testing method of airborne asbestos in a work environment by Asian countries. This PCM-based method is inexpensive, time-efficient and suitable for the monitoring of airborne asbestos in work environment and its control.

Critical appraisal

This method specifies the airborne fiber counting process and the result does not provide positive confirmation of asbestos fibers. Alternate differential counting techniques should be used if discrimination is desirable. As a supplementary method, Method 7402, which uses TEM, is provided in the NIOSH Manual of Analytical Methods.

Unique keywords

Abstract

Background: This document, generally called the NIOSH 7400, is a method for sampling and analyzing contaminants in workplace air. This method has been developed by NIOSH and evaluated according to established experimental protocols and performance criteria.

Objective: This method measures the airborne concentration of countable fibers using PCM. Countable fibers are defined as particles with length $>5\ \mu\text{m}$ and aspect ratio (length: width ratio) $>3:1$. The collection of airborne asbestos fibers using calibrated sampling pumps with mixed-cellulose ester (MCE) filters and the analysis by PCM are described.



Annotation

Fact 1

- Annotation is not provided for this factsheet.

Fact 2



Fact 3



Fact 4



Fact 5



References

<http://www.cdc.gov/niosh/docs/2003-154/pdfs/7400.pdf>