

Chapter

1. Asbestos Exposure Assessment, Risk Identification, and Substitutes

Section

B. Asbestos Exposure Assessment and Control in Occupational Settings

No./Title

a-14. Asbestos (bulk) by PLM. NMAM 9002

Author/Contributor

National Institute for Occupational Safety and Health (NIOSH)

Bibliographic ID

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

Introduction

Asian context

This PLM procedure provides an economical technique for screening large numbers of samples. Despite some disadvantages, it is worth considering the PLM-based method for analyzing asbestos in bulk for Asian countries.

Critical appraisal

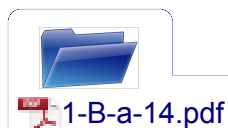
This method is designed for use with NIOSH Methods 7400 (PCM) and 7402 (electron microscopy/EDS). This method provides a detailed procedure of bulk asbestos analysis using PLM. Any material which is long, thin, and small enough to be viewed under the microscope can be considered an interference for asbestos.

Unique keywords

Abstract

Background: This method describes the collection and analysis of asbestos bulk materials by PLM techniques including central-stop dispersion microscopy. This method has been developed by NIOSH and evaluated according to established experimental protocols and performance criteria.

Objective: This method measures the presence of asbestos and its type and contents in a positive sample using PLM. Asbestos is identified on the basis of optical properties and its amount is estimated in relation to the rest of the bulk sample. The method estimates the asbestos percentage visually as perceived by the analyst in comparison to standard area projections, photos, and drawings, or trained experience.



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/9002.pdf>