

Chapter

1. Asbestos Exposure Assessment, Risk Identification, and Substitutes

Section

B. Asbestos Exposure Assessment and Control in Occupational Settings

No./Title

**a-19. Asbestos, chrysotile by XRD. NMAM 9000**

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 method is useful because the analysis results are close to the weight percentages. However, the high cost and complicated sample preparation and analysis process of this method should be taken into account for its availability

Critical appraisal

The XRD-based method should be applied in conjunction with another microscopic technique such as PLM and TEM because asbestiform and non-asbestiform minerals are not differentiated using the XRD technique.

Unique keywords

Abstract

Background: This method describes the analysis of chrysotile in bulk materials by XRD techniques. This method has been developed by NIOSH and evaluated according to established experimental protocols and performance criteria.

Objective: This method measures the weight percentages of chrysotile asbestos in a positive sample using XRD. The response of an unknown sample is compared to a calibration curve of standard chrysotile and the weight percentages are calculated. The working range of this method is from 1% to 100%.



## 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/9000.pdf>