

FILE NAME: RT Vanderbilt (RTV)

DATE: 1983 Dec 5

DOC#: RTV101

DOCUMENT DESCRIPTION: Letter from Consultant Showing Sample of International Talc 3X Contains Tremolite Asbestos

Contract research and scientific instruments
Microscopy, X-ray diffraction, mineralogy

Amtalc Association Ltd.,
7, Queen Avenue,
Dale Street,
Liverpool, L2 4TZ.

Your Ref: International
Talc 3X.
Our Ref: ME 922

5th December, 1983

This 800 gramme sample of International Talc 3X was sent to the Laboratory by Mr. R.W. Owens of Amtalc Association Ltd., We were requested to examine the talc and to report on its constituents.

The submitted sample of 3X Talc was examined using Optical Microscopy and X-Ray Diffraction.

Several sub-samples of the talc powder were mounted to glass microscope slides in liquids having refractive indices specific for talc and other mineral species known to be possible contaminants. Each specimen was examined using a polarising light microscope fitted with a dispersion staining objective. The estimated quantities of the mineral species found was based upon the number of particles present.

An X-Ray Diffraction pattern for the 3X Talc was recorded onto photographic film and the interplanar spacings were measured.

The mineral phases giving rise to the complex X-Ray Diffraction pattern were identified and these are listed in the Results table.

The mineral species found in the sample of 3X Talc are given below with their estimated quantities according to the number of particles.

Talc	~5%
Calcite	<2%
Quartz	<2%
Antigorite	<5%
Tremolite: non-fibrous	~52%
fibrous	~35%

Directors: Dr. J. B. Nelson Miss J. Prentice
Mrs. D. Nelson Mrs. S. Mark

Registration No: 811079
WES000836
London

' Amtalc Association Ltd.

ME 922
5.12.83

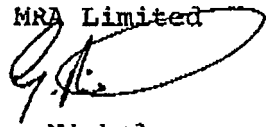
Results cont..

Tremolite accounted for between 85 and 90% of the talc sample. Approximately 35% of the samples consisted of Tremolite particles which conform to the regulatory definition of respirable fibres (length greater than 5 micrometres, width less than 3 micrometres, with an aspect ratio of greater than 3:1). The remainder of the Tremolite was non-fibrous.

CONCLUSIONS.

The submitted sample of International Talc 3X consisted of mainly of Tremolite of which a significant proportion was fibrous. Talc and Antigorite had quantities not exceeding 5%. Quartz and Calcite were present in minor quantities.

For MRA Limited


Gary Nichols.

enc.

WES000837