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DATE: 1976

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The Cosmetic, Toiletry and Fragrance Association, Inc.

1133 15th STREET, N.W., WASHINGTON, D.C. 20005 • 202/331-1770 • TELEX 89-2673

James H. Merritt
President
Norman F. Estrin, Ph.D.
Vice President—Science

March 15th, 1976

Mr. Heinz J. Eiermann
Food and Drug Administration
200 C Street, S.W.
Washington, D.C. 20204

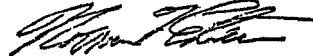
On March 11th, 1976, Mr. Eiermann --

-- the CTFA Talc Subcommittee met to discuss the current status of talc. It was recognized that a need exists to bring to your attention a profile of the analyses for asbestos from materials in talc used in the U.S. production of cosmetics and toiletry products.

[REDACTED]

Individual companies are more than willing to discuss the detailed data with you at your convenience.

Cordially,



Norman F. Estrin, Ph.D.
Vice President - Science

NFE:jj
Attachments

The Cosmetic, Toiletry and Fragrance Association, Inc.

1133 15th STREET, N.W., WASHINGTON, D.C. 20005 • 202/331-1770 • TELEX 89-2673

James H. Merritt
President
Norman F. Estrin, Ph.D.
Vice President—Science

MEMORANDUM

TO: Norman F. Estrin, Ph.D.
FROM: Anita S. Curry
DATE: March 12th, 1976

Jim Jenkins called regarding the letter you have asked for an SPM rent talc analyses. He wishes to inform you as to what they have been doing:

1. Mr. Clements contacted Dr. Langer who gave him the code on the Coty Airspun that was tested. It turns out that this was a July, 1969 production item.
2. In 1970 Coty changed to a completely different talc; since that time the supplier (WCSU) has supplied letters to the effect that they do continuous monitoring of production, even though individual batches sold to Coty may not be individually tested.
3. Coty has had tests run on intermittent batches at the Pfizer Laboratory in Easton, Pennsylvania. These were done by X-ray diffraction and TEM. The results were all negative. Also, in the last week they have tested 1974 and 1975 lots. These too were negative.

ASC:jj

AVON PRODUCTS, INC.

SUFFERN • NEW YORK 10901

March 12, 1976

Dr. Norman Estrin
CTFA
1133 15th Street, N.W.
Washington, D.C. 20005

Dear Norm:

This is to confirm our indication yesterday of our willingness to disclose to you and/or the Food and Drug Administration the results of our analyses of all lots of talc we have used in our products during the past three years.

During 1973 all of our talc receipts were sampled, and aliquots were sent to McCrone Associates for X-ray diffraction analyses with the specific request for confirmation of the presence or absence of chrysotile. We did not specify other amphiboles at that time because our earlier data indicated that they were present only rarely in the talcs we examined. A total of 170 samples of talcs used in our products were examined by McCrone during that year. The X-ray diffraction patterns are on file at McCrone and can be reviewed by authorized people. The results were negative.

Since February, 1974, we have analyzed about 250 samples of talc receipts in-house by OTA for chrysotile and IR for tremolite. As mentioned above, we felt that IR for tremolite was adequate for screening purposes, because of the rareness of other amphiboles. The data from these analyses can be made available, also, if needed. The results were negative.

Please let us know if there is anything else we can do to help resolve the question of asbestos in cosmetic talc.

Yours truly,

John J. Travers
John J. Travers

JJT:mc
cc: C. S. Rowland
G. A. Sprott
R. C. Reardon
Central File

Chesebrough-Pond's Inc.

RESEARCH LABORATORIES
TRUMBULL INDUSTRIAL PARK, TRUMBULL, CONNECTICUT 06411

PHONE: 802 377-7100

March 12, 1976

Dr. Norman Estrin
Cosmetic, Toiletory & Fragrance Association
1133 - 15th Street, N.W.
Washington, D.C. 20005

Dear Norman:

For some years, Chesebrough-Pond's Inc. has been concerned about reports that some talcs might contain asbestos as a naturally-occurring contaminant. As you know, we have cooperated with CTFA, and through CTFA with the FDA in developing suitable and practical methodology to resolve the very complex and difficult task of identifying asbestiform fibers in talc. We have also worked closely with responsible talc suppliers to identify high quality sources of talc.

By the beginning of 1973, we felt that practical methodology for the purpose was applicable. Since then, we have utilized the techniques described in the attachment to monitor incoming cosmetic talcs of three types that we have been using. These three are from three different geographical areas.

I have reviewed the results of these analyses on the incoming lots of these talcs used in recent production of cosmetic and toiletory products in the United States. The last 84 reports, covering a three-year period, are, without exception, negative for chrysotile and negative for fibrous amphiboles.

If it can be useful, we would be pleased to discuss these data with scientists at the Food and Drug Administration.

Sincerely,

Murray Berdick
Murray Berdick
Director of Regulatory Affairs

MB/bm
encl.

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Ex. 6587-2

and 004 ($3.65 \pm 0.05\text{\AA}$; $1/l_0 = 90 \pm 20$) reflections, and showing no line to the 14.6\text{\AA} chlorite region is necessary and sufficient evidence for the presence of chrysotile. A line at 14.6\text{\AA} in addition to, and of the proper intensity relative to, the 7.3\text{\AA} and 3.65\text{\AA} lines identifies chlorite rather than chrysotile.

When the x-ray evidence is equivocal, optical crystallography may be used to confirm chrysotile. Positive identification will then be based on the known morphological and optical properties of chrysotile. The normal form of chrysotile is a parallel bundle of long fibers, each a hollow cylinder only about 220\text{\AA} in diameter. It is monoclinic with γ ranging from $1.545 - 1.566$, β from $1.539 - 1.559$ and α from $1.532 - 1.550$. The sign of elongation is positive since γ lies nearly parallel to the length of the needles. The birefringence is about 0.015 hence a 5 μm thick bundle will show a retardation of 75 nm (gray). The birefringence of a 2 μm thick bundle of chrysotile fibers would be barely detectable even with a first order red plate.

Dispersion staining is a sensitive and specific method for long-fiber chrysotile. In the Cargille high dispersion liquid $n_D^{20} = 1.550$ most chrysotile fiber bundles show colors in the blue-magenta region with the central stop for the vibration direction parallel to the length and in the blue for vibration directions crosswise. Unfortunately, in a preparation of quartz particles about 10% will lie in a position showing the same two colors for vibration directions 90° apart. These can usually be identified as quartz by morphology or by the fact that the sample contains many other particles of similar morphology but showing blue central stop colors in all positions of stage rotation. All chrysotile fiber bundles are constrained by shape to lying flat, hence always showing both blue (crosswise) and blue-magenta (parallel to the length) for central stop colors.

Tremolite - Necessary and sufficient evidence for the presence of tremolite is an x-ray powder diffraction pattern with lines at $8.4 \pm 0.1\text{\AA}$, $3.27 \pm 0.05\text{\AA}$, $3.03 \pm 0.05\text{\AA}$ and $2.92 \pm 0.05\text{\AA}$. (Note: zinc and magnesium stearate may interfere at $8.4\text{\AA}$ and calcite at $3.03\text{\AA}$.)

When the x-ray evidence is equivocal, optical crystallography may be used to verify the presence of tremolite. Positive evidence will then be based on accepted morphological and optical properties of tremolite. The common form is monoclinic rods elongated nearly parallel to γ (about 1.63) but with oblique extinction of $10-21^\circ$ for crystals lying on the 010 face. The optic axial plane is 010, hence α (about 1.60) is also shown on the 010 view. The view showing β (about 1.615) and γ (about 1.63) shows parallel extinction. The optic axial angle is about 80° with a negative sign and weak dispersion, $v > r$. Polarization colors are moderate and approximately 100 nm (gray) for a 10 μm thick rod in all crosswise orientations, 200 nm (yellow) for a 30 μm thick crystal. Characteristic dispersion staining colors are observed in Cargille high dispersion liquid 1.605: about 430 nm is λ_0 for γ , blue-violet with the annular stop and yellow with the central stop; about 490 nm for β , blue-green (annular stop) and golden magenta (central stop); and about 600 nm for α , yellow-orange (annular stop) and blue (central stop).

COLGATE-PALMOLIVE COMPANY
909 River Road
Piscataway, N.J. 08854

March 15, 1976

Norman F. Estrin, Ph.D.
Vice President
The Cosmetic, Toiletory and
Fragrance Association, Inc.
1133-15th Street, N.W.
Washington, D.C. 20005

Dear Dr. Estrin:

Attached please find a summary of Analytical Data on 42 Talc Samples (representing 20 raw materials and 17 finished products) covering the period 1971 to present and examined by various techniques by the Colgate-Palmolive Research and Development Analytical Department and McCrone Associates.

Asbestos minerals were not detected in any of these samples, with the exception of insignificant trace amounts found by microscopic methods in three samples from 1971-1972, which is believed due to laboratory contamination. Other methodologies indicate the absence of any asbestos. The results of these analyses indicate to us that talc products produced by the Colgate-Palmolive Company since 1972 are free of asbestos minerals when subjected to the most sophisticated methodology available.

We have ascertained by inspection of the package and analyses of the product that the sample of Colgate-Palmolive's Cashmere Rouge[®] examined by Dr. Langer of Mt. Sinai Hospital was manufactured prior to 1970. The Bauer and Black Talc reported by Dr. Langer has not been manufactured since the end of World War II. This company was acquired by Colgate-Palmolive approximately three years ago.

Very truly yours,

Christopher H. Costello
Christopher H. Costello, Ph.D.
Administrator Regulatory Affairs

CHC:mp
Attachments

March 12, 1976

To: Dr. C. H. Costello
From: J. P. Sisko, Jr.
Subject: Analytical Data on Talc Samples 1972-Present

Since late 1972 when the possibility of asbestos in talc was first raised, R&D Analytical has been engaged in re-analyzing U.S. talc raw material and finished products for asbestos minerals by the most sophisticated methodology available at that time. Analyses were made on a spot-check basis. Techniques used in-house are x-ray diffraction followed by optical and scanning electron microscopy, if necessary. X-ray is the basic screening tool and examination by microscopy is made when positive responses occur. Additional tests on random samples were made by transmission electron microscopy and selected area electron diffraction by an outside consulting firm.

Forty-two samples (from 20 raw materials and from 17 finished products), covering the period 1971 to the present, have been examined by these various techniques. Asbestos minerals were not detected in any of these with the exception of trace amounts in 3 samples from 1971-2. These levels are considered generally below the normal background levels encountered when this microscopic methodology is employed. It is believed that these trace amounts are due to laboratory contamination. A detailed tabulation is attached.

JPS/ed
Att.

No. of Samples Examined for Asbestos Minerals 1972-76

Method	Raw Talc	Cashmere Bouquet
TEM-SAXD	#5	**7
Sample dates (yrs.)	1971-72	1972-76
X-ray plus microscopy (optical - SEM)	12	11
Sample dates (yrs.)	1971-76	1972-76
DXA	6	1
Sample dates (yrs.)	1972	1972

*1 sample 1971 raw talc contained 10-100 ppm. chrysotile
*1 sample 1971 raw talc contained 1-10 ppm. chrysotile
**1 sample 1972 Cashmere Bouquet talc contained <5 ppm. chrysotile
No amphibole detected in any of these.

These levels represent possible background contamination

JPS/ed
3-12-76

CTFA VSH
 W VSH
 TLXAYAB UAF139(1427)(1-818216A872)PD 83/12/76 1424
 TVX CIM123 LSA
 28 LOSA CA
 PMS THE COSMETIC, TOILETRY AND FRAGRANCE ASSOCIATION, IN.
 1133 FIFTEENTH STREET, N. W.
 WASHINGTON, D. C. 20005

MARCH 12, 1976
 DR. NORMAN ESTRIN
 VICE PRESIDENT - SCIENCE

DEAR DR. ESTRIN:

AS A RESULT OF DISCUSSIONS I HAVE HAD WITH LOUIS MURINO CONCERNING THE MARCH 11, 1976 CTFA TALC SUB-COMMITTEE MEETING, I WOULD LIKE TO STATE THAT WE HAVE A CONTINUING PROGRAM IN EXISTENCE TO TEST OUR MONTANA GRADES OF TALCS THAT ARE BEING OFFERED TO THE COSMETIC INDUSTRY.

PRIOR CORRESPONDENCE BETWEEN OURSELVES AND MR. GEORGE V. SANDLAND, CHAIRMAN OF THE TALC SUB-COMMITTEE, HAS ESTABLISHED THAT WE HAVE TESTED 2,839 SAMPLES FROM OUR CORE DRILLING PROGRAM AND BY X-RAY DIFFRACTION PATTERNS HAVE NO SEEN ANY DETECTABLE LEVELS OF CHRYSOTILE AND TREMOLITE. OUR X-RAY DIFFRACTION TECHNIQUES ARE IN ACCORDANCE WITH THE CTFA J-4-1 METHOD OUTLINED FOR USE UNDER CTFA SPECIFICATIONS FOR COSMETIC TALC.

SINCE OUR ORIGINAL INVESTIGATION AND SUBMISSION (AUGUST 8, 1975), WE HAVE EVALUATED AN ADDITIONAL FIFTY MONTANA

PRODUCTION SAMPLES WITH THE SAME EXCELLENT RESULTS. WE CONTINUE TO USE X-RAY DIFFRACTION TECHNIQUES AS OUTLINED BY CTFA J-4-1.

WE SHALL BE HAPPY TO CONTINUE TO COOPERATE WITH CTFA IN OUR TESTING PROGRAM.

VERY TRULY YOURS,

H. T. MURRYAN
 PRESIDENT

CYPRUS INDUSTRIAL MINERALS COMPANY
 335 SOUTH FLOWER STREET
 LOS ANGELES, CALIFORNIA 90071
 TELEPHONE (213) 489-3788
 END
 NNNN

323PEST
 CTFA VSH



TALC INVESTIGATIONS

Our investigations of talc dates back to November 1972, when the following samples were analyzed by McCrone Associates and found to be free of any asbestos content:

Musc Talc	9-26-72
Aphrodite Women's Talc	9-26-72
Aphrodite Men's Talc	9-26-72
Flambeau Talc	9-26-72
Woodhue Men's Talc	9-26-72
Straw Hat Talc	9-26-72
Tigress Talc	9-26-72
Brut Talc	9-26-72
Kiku Talc	9-26-72
Woodhue Women's Talc	9-26-72
Xanadu Talc	9-26-72
Zisania Talc	9-26-72

In November 1975, the following samples were again analyzed by McCrone Associates and found to be free of any asbestos content:

Brut Talc	3.4.75
Brut Talc	20.8.75
Kiku Talc	11.11.75
Kiku Talc	28.4.75
Kiku Talc	3.7.75
Xanadu Talc	20.6.75

On March 9, 1976, McCrone Assoc. purchased in a Chicago store, one 4 oz. container of Brut Talc, Lot #2585, which was produced on September 15, 1975. This sample was also found to be free of any asbestos content.

FABERGE DIVISION 65 RAILROAD AVENUE, ROCKEFIELD, NEW JERSEY 07067 (201) 946-5400

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Johnson & Johnson

BABY PRODUCTS COMPANY

NEW BRUNSWICK, N. J. 08903

Dr. N. F. Estrin
C.T.F.A.

-2-

March 15, 1976

March 15, 1976

Dr. Norman F. Estrin
Vice President - Science
Cosmetic, Toiletries, and
Fragrance Association
1133 15th Street, N.W.
Washington, D.C. 20005

Re: Examination for Asbestos in Talc

Dear Dr. Estrin:

The talc which is used by Johnson & Johnson is solely derived from its own mine in Vermont, where the ore is mined selectively and then beneficiated by the process of flotation.

Shipments of this highly purified talc are routinely examined by our own laboratory to verify the absence of asbestos minerals.

Historically, Johnson & Johnson has always been concerned about the mineralogical integrity of its talcs and even its earliest specifications have required the examination for acicular particulates. When it was erroneously reported in 1971 that our powder contained asbestos, we sponsored a scientific seminar of mineralogical and analytical experts for the FDA to prove that our talc is not contaminated with asbestos. At that time numerous samples were analyzed by experienced consultants such as McCrone Associates, Colorado School of Mines, Professor F. D. Pooley (of the University College, Cardiff), Professor G. Brown (of Princeton), and Professor M. Buerger (of M.I.T.). These examinations included X-ray diffraction analysis, differential thermal analysis, and transmission electron microscopy.

During the period December 1972 to October 1973, 93 lots were individually sampled and examined by X-ray diffractometry for the presence of asbestos minerals. No amphiboles or serpentine minerals were detected in any sample.

Beginning in October 1973, differential thermal analysis was added to our specified requirement. Both, differential thermal analysis and X-ray diffractometry were instituted for the routine examination of sequential lots. A further 100 lots have since been examined, applying both methods to each sample. Again, no amphibole or serpentine minerals have been detected.

I would like to advise that we are continuing to employ differential thermal analysis and X-ray diffractometry in the examination of sequential lots for the detection of amphibole and serpentine minerals.

It should be pointed out that we also maintain a worldwide monitoring of talcs used by our Johnson & Johnson affiliates, employing these same techniques.

Finally, let me add that periodically, we also submit sub-samples for Transmission Electron Microscope examination and these have always verified the absence of asbestiform minerals.

It is our understanding that you would wish to submit this information to the FDA. Please regard this letter as non-confidential.

Sincerely yours,

George Lee
Director of Applied Research

GL/wm

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Ex. 6587-6

Johnson & Johnson

BABY PRODUCTS COMPANY

NEW BRUNSWICK, N. J. 08903

March 14, 1976

EXAMINATION OF AMERICAN & BRITISH TALCUM POWDER
PRODUCTS BY DR. F. D. POOLEY

A total of 38 samples originating from the laboratory of the Department of Environmental Health, Mt. Sinai Hospital were examined by Dr. F. D. Pooley in an effort to substantiate results reported by staff of the Mt. Sinai Hospital.

American Talcum Products

A total of 20 samples (corresponding to 19 American products) were subjected to examination by X-ray and electron microscope. Dr. Pooley verified that five products contained several percent, by weight, of fibrous anthophyllite asbestos.

This is in contrast to the Mt. Sinai report that five of the products contained 8 to 20% asbestos and that another five of the products contained less than 5% asbestos.

British Talcum Products

Similarly, 18 products were examined by Dr. Pooley. He verified one product as containing anthophyllite. On the other hand, the Mt. Sinai laboratory reported finding tremolite in three products and anthophyllite in a fourth product. They further reported that tremolite or anthophyllite were "indicated at or near the lower limit of detectability" in five other samples. It was also reported that "serpentine phase was found in two, and possibly in several other samples," but "electron microscopic examination would be required to resolve the possibility of the existence of chrysotile". However, Dr. Pooley's subsequent examination with the transmission electron microscope has refuted the existence of any chrysotile.

It should be emphasized that these American products were sampled in 1973 and are not necessarily representative of current American talcum production.



walter c. mcrone associates, inc.

CONSULTING, ULTRAMICROANALYSIS • MICROSCOPY • SMALL PARTICLE PROBLEMS • SOLID-STATE CHEMISTRY

12 March 1976

Dr. Norman Estrin
Cosmetics Toiletries and Fragrances Association
1133 15th Street, N.W.
Washington, D.C. 20005

Dear Dr. Estrin:

This letter will amplify our recent conversation on talc analyses for asbestos.

Since 1971, Walter C. McCrone Associates, Inc., has worked with several producers and users of talc, the majority of them involved with cosmetic grades of talc. During this period we have analyzed several hundred talc samples for the presence of asbestiform minerals. The methodologies used have been principally X-ray diffraction and light microscopy using dispersion staining, although extensive transmission electron microscopy examinations have been carried out for some companies. Subject to the approval of our clients, we are prepared to make available to the FDA, through CTFA, the results of these analyses. We also have available retained samples for most of the analyses.

Verbal agreement to release this data has been already given by clients accounting for probably 80-90% of the samples; the others have not yet been approached. It would, however, be improper for us to comment on specific samples until such time as written approval is received from our clients, together with identification of those materials used in cosmetic production. The latter point is stressed because several of our analyses represent the results of raw material assessments which some companies initiated and might include talc ore bodies which are unacceptable for cosmetic applications.

I do not think, however, that I would be violating any company confidences if I were to comment on the asbestos in talc situation as we saw it over the last 5 years. I think our view can be summarized quite briefly as follows.

2826 SOUTH MICHIGAN AVENUE • CHICAGO, ILLINOIS 60616 • 312/842-7188 • CABLE: CHEMCRONE

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Ex. 6587-7

13 March 1976

Dr. Norman Estrin
Cosmetics Toiletries and Fragrances Association

Page Two

Some cosmetic talcs prior to about mid-1972 to early 1973 were found to contain amphiboles -- principally of the Tremolite-Anthophyllite type at levels, determined by X-ray diffraction, of the order of 5-15% by weight.

Microscopical examination of these talcs, however, indicated that the bulk of this amphibole content (>90%) was non-fibrous, even applying the 3:1 aspect ratio criterion for a fiber, and hence not asbestos.

No chrysotile asbestos was found in these talcs.

Since 1973 none of the talcs which we have examined and which have been identified to us as production materials have shown any detectable levels of either chrysotile or asbestiform amphiboles.

Yours sincerely,

Ian M. Stewart

Ian M. Stewart
Manager, Electron Optics Group

Companies contacted and granting verbal approval to release information include:

Avon Products, Inc.
Bristol-Myers Products
Chesebrough-Pond's, Inc.
Colgate-Palmolive, Inc.
Fabergé, Inc.
Johnson & Johnson
Windsor Minerals, Inc.
Whittaker, Clark & Daniels, Inc.

lmh

STERLING DRUG INC.

90 PARK AVENUE, NEW YORK, N. Y. 10016

EXECUTIVE OFFICES

March 12, 1976

Corporate Director of Quality

AREA CODE 212
PHONE 672-6141
CABLE: STER DRUG
TELEX: 411330

Dr. Norman Estrin
Vice President - Science
The Cosmetic, Toiletry & Fragrance Association, Inc.
1133 Fifteenth Street N.W.
Washington, D.C. 20005

Dear Norman:

Sterling Drug Inc. initiated testing in November 1971 of the talc used in "ZBT Baby Powder" for the presence of asbestiform minerals. Since that time we have had tested by X-ray diffraction analysis about one-third of the lots received. In all instances the results indicated there was no detectable asbestiform minerals present in these samples. We also have had assurance from our supplier, Whittaker, Clark & Daniels, Inc., that they routinely monitor the shipments of talc supplied us for the presence of asbestiform minerals and have found no detectable amounts.

We are willing to meet with FDA at some future date to present the detailed results of this testing.

As I told you the code on the package of "ZBT Baby Powder" tested by the Mount Sinai Hospital group was coded and was produced in June 1970. We are of the opinion that the testing we and our suppliers have performed assures us that the "ZBT Baby Powder" produced since late 1971 does not contain asbestiform minerals.

Sincerely,

Roderick A. Mundy
Roderick A. Mundy

RAM:ma

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CABLE "SLEINAD"



(201) 841-4100

WHITTAKER, CLARK & DANIELS, INC.

1000 COOLIDGE STREET • SOUTH PLAINFIELD, N.J. 07080

March 11, 1978

Dr. Norman Estrin
CTFA Headquarters
1133 Fifteenth Street, N.W.
Washington, D.C. 20005

Dear Dr. Estrin:

In August, 1971 a test program was instituted by our company to insure customers using our cosmetic grade talcs that they are free of fibrous asbestos. It was determined that the use of X-ray diffraction would be the most practical method of detecting the possible presence of asbestos and thus assure us of a reliable and workable means of periodic monitoring our talcs. In the event that the results of this testing showed possible positive results, the sample was further subjected to optical microscopy. In all cases the testing of our products was performed by outside independent laboratories.

We have also used other test methods such as Differential Thermal Analysis and Optical Microscopy, however X-ray diffraction gave us the best reproducible results.

Our file contains reports on various grades of cosmetic talc from areas in Alabama, North Carolina, Montana, Italy, South Korea and Vermont. These reports were based on approximately 74 ground ore samples analyzed over a period of four years all of which show non-detectable amounts of fibrous asbestos form minerals. Additionally, separate tests made during this period by many of our customers supported and substantiated our test results.

All of the testing for the presence of asbestos form minerals in talc has been performed by "outside experts" including the following:

Walter C. McCrone Associates, Chicago, Illinois
Ernest Fullom Associates, Schenectady, New York
E.S. Laboratories, Marlton, New Jersey
Prof. Charles R. Manning, North Carolina University
Prof. Seymour Z. Lewin, New York University
Dr. Gordon Brown, Princeton University

continued

IMPORTERS • MANUFACTURERS • EXPORTERS
MINERALS, COLORS, PIGMENTS

De Bell & Richardson, Enfield, Connecticut
Columbia Scientific Industries, Austin, Texas

We are willing to submit this information to the committee in detail to help substantiate their claims.

Very truly yours,

WHITTAKER, CLARK & DANIELS, INC.

Frederick F. Roesch
Frederick F. Roesch
Executive Vice President

FFR/dm

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