

FILE NAME: Painters and Allied Trades (PAINT)

DATE: 1978-1980

DOC#: PAINT085

DOCUMENT DESCRIPTION: Memos by The Navy Re Asbestos and Talc

*Reduction of Asbestos
qualified replacement products*

141

Code 185
Ser 116-78
26 June 1978

MEMORANDUM

From: Code 185
To: Code 500

Subj: Tremolite Talc Containing Asbestos Fibers

Encl: (1) Naval Spdltr from Commander, Mare Island Naval Shipyard
to Commander, Naval Sea Systems Command of 20 Jun 1978

1. Enclosure (1) identified subject in use at Mare Island Naval Shipyard and procedures taken to reclaim talc containing asbestos fibers for disposal while substituting non-asbestos talc.
2. Request search of procurement documents and/or inventory lists to locate subject in supply points (Shop Stores) at Philadelphia Naval Shipyard.
3. Notify Code 185 of stocking locations NLT 20 July 1978.

Joseph W. Kennedy
JOSEPH W. KENNEDY

Copy to: (w/encl)
Code 134
300

*Date sheet
on file*

NDT -

*check the
talc suspension*

LABORATORY TEST REQUEST
 12ND JUNE 4730/19 (REV. 3-78)

JUN 15 1978
 Sub. 1105 1178d Three
 Copies To Laboratory.

LABORATORY REPORT NO.
 289278

TO:	FROM	DATE
☒ CHEMISTRY LAB, CODE 1341	570.11	6-15-78
☐ METALLURGICAL LAB, CODE 1342	67HS	COPY TO
☐ MATERIAL TEST LAB, CODE 1343	570.11	570.11
☐ RADIOCHEMISTRY LAB, CODE 1344	570.11	CONTRACT NO.
OTHER	81650838	1F481608817
	81650838	DOCUMENT NO.
		81608847
		GRADE
		CLASS

DESCRIPTION OF MATERIAL: TALC, TECHNICAL GRADE, POWDER FORM
 "MONTANA GRADE PLATE"
 AMP 25-38 14 50 LBS SACKS

CHEMICAL		METALLURGICAL & PHYSICAL	
☒ CONFORMANCE TO	OTHER	TENSION	☐ MACRO
☒ IDENTIFICATION AS		HARDNESS	☐ SEAMLESS
TESTING INSTRUCTIONS: (WIR, T-SHEET, DIM, PEG, OTHER)			

TEST FOR ASBESTOS		DISPOSITION OF SAMPLES	
NO. OF TEST SAMPLES	NO. OF PLIES REPRESENTED	☒ EXTENDABLE	☐ RETURN TO SENDER
SUPERVISOR SIGNATURE	CODE	PHONE	
<i>[Signature]</i>	570.11	4628	
LABORATORY USE ONLY			

No asbestos detected in OA 7 AT 749 or 207 AT 749.
 AUG 23 1978

Stock NO 6810 LL T99 9893

UI LB

Call Mr. Barbore, shop store
 at 4760 if any
 further question, Bldg 5
 Mr. H. L. Lewis, Code 502

ANALYST/INVESTIGATOR	AUTHENTICATED BY	SECTION HEAD
	<i>[Signature]</i>	M. LEW

05D2/6101C/JJT
9631
Ser 35

30 MAY 1979

From: Commander, Naval Sea Systems Command
To: Commander, Mare Island Naval Shipyard

Subj: Asbestos Content of Magnesium Silicate Raw Materials Used in Manufacture of MIL-P-24441 Epoxy Coatings

Ref: (a) NAVSEC Project Order N6519779P090620

1. It is requested that Mare Island Naval Shipyard (NAVSHIPYD Mare) evaluate magnesium silicate from:

R. T. Vanderbilt Co.	(Nytal 300)
Pfizer Co., Minerals & Pigments	(CP 20-30)
Cyprus Mistic	(139)
Desert Minerals Talc Co.	(Hy-Fine 80)

to determine asbestos fiber content.

2. Although tremolite is the major mineral fiber in asbestos, other mineral fibers are chrysolite, amosite, crocidolite, anthophyllite, and actinolite. These fibers are to be identified also and, if present, reported along with tremolite.

3. The magnesium silicate pigments of paragraph one (1) shall also be evaluated physically and chemically. In particular, oil absorption should be determined and compared to the material used to make reformulated MIL-P-24441 materials, i.e. Pfizer Cp 20-30 magnesium silicate.

~~The~~ The effort is within the scope of funding of reference (a).

A. T. ANDERSON
By direction

Blind copy to:
NAVSEA 05D23/6101E
534/6159C
921TH3

Prepared by: John J. Tock/05D21/6101C/20214
Typed by: L. Sandejo Hager/24 May 1979

B 109398

*RTV
- USG/Navy
- *Robert [unclear]*
(file?)

File 5137.1

Naval Specificate

OPTIONAL FORM NO. 10 (Rev. 7-77)
USE PREVIOUS EDITIONS
LETTERS ONLY

DO NOT WRITE IN THESE SPACES
COMMUNICATIONS OFFICE

☒ REGULAR ☐ AIR ☐ SPECIAL DELIVERY		☐ REGISTERED ☐ CERTIFIED	CLASSIFICATION Unclassified IN SIGHT PLACES TO 185-Ser 486 /5100	DATE JUN 20 1978
TO Commander Naval Sea Systems Command (SEA 073C) Washington, D. C. 20362				

- INSTRUCTIONS**
1. Message type should be in plaintext.
 2. Add addresses must be appropriate for mail or envelope or data handling, as indicated by the instructions on the back of the envelope or data handling, when a form is used to handle data as guides for various envelope addresses.
 3. Give priority to processing, routing, and action required. Avoid time-consuming controls.
 4. In order to speed processing, it is recommended that this special window envelope, if NAV 100-105A, Speedier Envelope, is provided for use in classified enclosures where data handling is not used. Other window envelopes should be used in bulk mail, enclosures should be used on top of regular correspondence.

100 STANDARD REFERENCES AND ENCLOSURES, IF ANY TEXT AND SIGNATURE BLOCK

FOR OFFICIAL USE ONLY

Subj: Review of Tremolite Talc containing asbestos fibers on Mare Island Naval Shipyard

Ref: (a) FOREGOING between R. D. Patterson, SEA 073C, and A. E. Leveque, Code 185, NAVSHIPYDMARE, of 7 June 1978
 (b) FOREGOING between R. D. Patterson, SEA 073C, and A. E. Leveque, Code 185, NAVSHIPYDMARE, of 16 June 1978

Encl: (1) Report of Review of Talc, containing asbestiform, used on Mare Island Naval Shipyard
 (2) Field Information Memo #74-92, U. S. Department of Labor, OSEA

1. During a telephone conversation (reference a), Mare Island Safety Office reported that through microscopic evaluation, Talc used in production facilitating processes appeared to contain asbestos fibers. In a telephone conversation (reference b), the Safety Director, Mare Island Naval Shipyard, reported the findings and actions taken to NAVSEA. Enclosure (1) is results of the survey and enclosure (2) is background information pertaining to Tremolite and asbestiform requirements.

2. Actions taken.

a. A hold was placed on all Talc used in production facilitating processes to determine possible asbestiform contamination.

ALL Naval Shipyard
 BUREAU (Code 55)
 NAVSEA O-6F

FROM
 Commander
 Mare Island Naval Shipyard
 Vallejo, California 94592

N46/5100
 100
 185
 130
 300
 303

ADDRESS REPLY AS SHOWN AT LEFT OR REPLY HEREON AND RETURN

CLASSIFICATION
Unclassified

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CRMC-HT-TA

OUT 0020

1543



DEPARTMENT OF THE NAVY
MARE ISLAND NAVAL SHIPYARD
VALLEJO, CALIFORNIA 94582

IN REPLY REFER TO:
134.05-Ser 376
9631

JAN 07 1980

From: Commander, Mare Island Naval Shipyard
To: Commander, Naval Sea Systems Command (05D21)
Subj: Asbestos content of talc suitable for use in MIL-P-24441 paint
Ref: (a) NAVSEA ltr 05D2/6101C/JJT 9631 Ser 55 of 30 May 1979
Encl: (1) Project Proposal, Evaluating the Airborne Asbestos Released by Grinding, Sanding, and Blasting Asbestos Containing Paints

1. Reference (a) requested Mare Island Naval Shipyard to examine four talcs for asbestos content and for comparability to the Pfizer Microtalc CP 20-30 talc used to make reformulated MIL-P-24441 paints.
2. The asbestos content of the talcs was determined by microscopic analysis using dispersion staining. The oil absorptions are based on data reported by the National Paint and Coatings Association and by the talc suppliers. The oil absorptions were determined according to ASTM D-281 which has a reproducibility of $\pm 25\%$. The results are as follows:

<u>Source</u>	<u>Oil Absorption</u>	<u>Asbestos Content</u>
Cyprus Mistron 139	35	Slight amount of fibrous tremolite in one of two samples.
Desert Minerals Talc Co., Hi-Fine 80	36	Large amounts of fibrous tremolite present.
Pfizer Microtalc CP 20-30	29	Slight amount of fibrous tremolite in one of two samples tested.
R. T. Vanderbilt, Nytal 300	29	Large amounts of fibrous tremolite and a small amount of anthophyllite present.

3. The airborne dust hazards of asbestos in paint are unknown. Asbestos fibers that are tightly bound into a paint should not be a problem. However, when paints are removed by dust generating methods, such as sanding or abrasive blasting, asbestos fibers could be released. Dried paints are brittle and the shattering action of abrasive removal could break the paint vehicle away from the asbestos and release the fibers.

018553

Enc (1)

Subj: Asbestos content of talc suitable for use in MIL-P-24441 paint

Talc is a common paint ingredient and is used in a wide variety of paints sold to the Navy. Some talcs are relatively free of asbestos while others may contain from 20 to 60% asbestos. Hence, it is safe to assume that all commissioned ships are coated with asbestos containing paints. The potential for generating airborne asbestos particles during grinding, sanding, or abrasive blasting of ships coated with asbestos containing paints will depend on the amount of asbestos in the dried paint being removed. Unfortunately, there is no standard analytical method for measuring the asbestos content of dried paint and the actual amount of airborne asbestos released by surface preparation of such paints is not known.

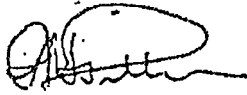
4. The potential problem of generating airborne asbestos particles during surface preparation can be prevented by: (a) prohibiting the use of high asbestos content talc in Navy formula paints and, (b) requiring the use of Navy formula paints whenever practical. However, this approach will not work for proprietary formulas such as those procured under TT-E-490 (silicone-alkyd topside paint). Standard analytical methods for measuring the asbestos content of paints do not exist and there is no accepted limit for the asbestos content of paints. Consequently, there is no way to establish and enforce practical asbestos limitations for proprietary paints.

5. Based on these observations, it is recommended that:

a. The airborne asbestos generated during the surface preparation of high asbestos content paints be investigated. Such an investigation will have to determine the airborne asbestos dusting hazard posed by using different surface preparation methods to remove paints of known asbestos content. A major part of such a task will be to develop analytical methods for determining the asbestos content of wet and dry paints. Enclosure (1) outlines a project to accomplish such a study.

b. Approve Mistron 139 and Microtalc CP2030 for use in MIL-P-24441 paints.

6. Mare Island Naval Shipyard has trained personnel and equipment needed to accomplish the recommended task. However, no technical personnel are available for assignment to the task at this time. The potential airborne asbestos problem associated with asbestos containing paints should be investigated. Mare Island is willing to support such a project to the fullest extent possible but cannot take the lead on such a task until FY 81. It is estimated the project can be completed within 12 months for \$75,000.


M. L. FITTMAN
By direction