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DOCUMENT DESCRIPTION: Answers to Questions from the Department of the Navy RE Asbestos-Free Insulation with Response Letter

L. W. Saxby - Toledo

D. Bradshaw - San Francisco

May 29, 1969

ASBESTOS-FREE INSULATION

W. E. Munsey - Santa Clara
L. J. Brunel - San Francisco

The answers to the questions raised by the Department of the Navy are not easy to give as would be expected or the department would not have gone to industry requesting the information.

Without considerable research, which time does not permit, our answers are limited.

The answers are as follows:

(a) Foamglas
Fiberglas Multitemp (if revived)
How about a pipe covering molded from Fiberglas Intermediate Service
Board wool to 750°F
In blanket form Eagle-Picher Alumafelt and Tablock
Standard Fiberglas pipe covering to 450°F

(b) No molded materials known to us.
E-P Tablock pipe covering in blanket form good to 1400°F.

(c) Tempmat and Ercomat to 1200°F (same product).
Fiberglas Marine High Temp. Insulation to 1200°F.
E-P Superglas Molded Felt to 1800°F
E-P Mineral Fiber Blankets to 1400°F

(d) Fiberglas cloths and tapes manufactured to meet either outside or hot side temperatures according to use.

(e) No finishing cement known which does not contain asbestos fibers.

(f) Duct collection systems and breathing masks.

(g) Specifically related to Navy work it is very impractical to install dust collection systems on board ship to protect all craft workers either when installing or removing insulation materials, and all men would have to wear proven masks when available to assure total protection of every man working on board.
The direction to go is to non asbestos materials.

(h) It appears that it should be possible to go to non asbestos insulation systems at about present costs. Some allowances may have to be made for appearance or damage resistance, but this would be minor in the achievement of the objective.
This is based on the availability of a non asbestos calcium silicate pipe covering and finishing cement.

This is the time to perfect a coated Fiberglas textile fiber resistant to the base chemical conditions found in calcium silicates for use as the reinforcement in Kaylo.

Let's get rid of asbestos in the insulation industry and we can then get rid of other costly problems which are beginning to develop. This should be our number one research program at this time, as we now have the cause for this important action.

DB:kw

June 13, 1969

Mr. M. Arnuth
Department of the Navy
Naval Ship Engineering Center
Philadelphia Division 6764
Philadelphia, Pa., 19112

RE: PROPOSED INSULATION MATERIALS
NAVAL VESSELS

Your Ref.: 6764:MA:lal
9330 (TA-237)
Ser 752

Dear Mr. Arnuth:

The following is in addition to Mr. J.P. Kern's letter of May 29, 1969 with regard to the above. These comments refer to items "a through h" in the referenced letter. In accordance with your letter, it is assumed that the information given below will be held on a confidential basis where shown, since these programs are still in the product development phase.

a) We can offer alternate non-asbestos containing materials in cylindrical sections up to 3' long and split in half lengthwise as follows:

1. Fiberglas Heavy Density Sectional Pipe Insulation (450 F Max.)

2. The following product is in product development and will be available in a flat board form which is factory scored and faced and applied as a "wrap-around" pipe insulation.

P.I.M. (Pipe Insulation Material) (850 F Max.)
(Confid)

3. We have a product in development now that is sectional, fibrous glass in nature precision molded and will be suitable for application up to 900 F.

b) We can offer the following single or multiple layer pipe insulation products for applications from 750 F to 1200 F.

1. The following product is in product development and will be available in a flat board form which is factory scored and faced and applied as a "wrap-around" pipe insulation.

Mr. H. Arnith
Department of the Navy

June 13, 1969

P.I.M. (Pipe Insulation Material) (650 F Max.) (Confid)

2. We have a product in development now that is sectional, fibrous glass in nature precision molded and will be suitable for application up to 900 F.

c) The following non-asbestos products can be used on valves and other irregular surfaces from cold water temperature to 900 F.

1. C.C. Flexible Tubing and Sheeting (-50F to 770 F)

2. Glass Mat (230 F to 1200 F) (Confid)

3. Marine High Temperature (Up to 1200 F)

d) The following non-asbestos containing cloth materials are available as a lagging jacket over thermal insulation from -5 F to 1050 F. For -5 F to 70 F it is understood that appropriate vapor barrier mastics will be required.

1. Pre-Sized Glass Cloth (Up to 600 F)

2. Ferul-glas Tape (Carolina Mills) (Up to 1000 F)

NOTE: From 70 F to 600 F Pre-Sized Glass Cloth can be used as the inner and outer jacketing for removable covers. Above 600 F, it is recommended that Inconel Mesh be used.

e) We have no asbestos free product that can be used as a finishing cement over block insulation and irregular surfaces.

f) We have highly efficient dust collectors installed in all of our manufacturing facilities as a safety precaution where required to prevent inhalation of dust during the manufacturing process of insulation materials.

g) Where it is deemed necessary by the contractor, due to the installation and/or fabricating conditions when asbestos bearing products are used, we recommend the use of Bureau of Mines approved inhalators.

NOTE: Enclosed you will find the following bulletins which have been published by the National Insulation Manufacturers Association to alert users of insulation about proper safety precautions.

1. Recommended Health Safety Practices
(For Handling and Applying Thermal Insulation Products Containing Mineral Fibers)

Mr. M. Arruth
Department of the Navy

June 13, 1969

2. Recommended Health Safety Practices
(For Handling and Applying Thermal Insulation Products Containing Asbestos)

3. A Report on Health Aspects of Fibrous Glass.

b) There will be no effect on material cost in the areas noted above except where Glass Cloth and Inconel Mesh have replaced asbestos cloth (Item d above). From the standpoint of installation cost, fibrous materials are easier to fabricate and install compared with the more rigid calcium silicate type products which contain a small percentage of asbestos.

A Project Team has been formed within Owens-Corning that is available to assist you in any questions you may have regarding the above. It consists of representatives assigned from the following departments:

1. Marketing

2. Basic Research

3. Product Development

4. Medical

5. Contracting

The answers to your letter, as given above, are rather comprehensive with regard to the recommended non-asbestos bearing products. Since this letter would become very burdensome to have product literature and samples included, and in view of the fact that some of the products are still on a confidential basis, it is recommended that we arrange for your Task Group to visit our research facilities in Granville, Ohio to discuss these products in detail.

The Project Team here at Owens-Corning is at your complete disposal. Please don't hesitate to call us if you have any questions on any of the above.

Very truly yours,

OWENS-CORNING FIBERGLAS CORP.

A.S. Kevlin

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