OWENS-ILLINOIS GLASS COMPANY

"FIRST IN GLASS"

MANUFACTURER OF GLASS PRODUCTS

GENERAL OFFICES

TOLEDO

February 12, 1943

Dr. L. U. Gardner,
Saranac Laboratories,
Saranac Lake, New York.

Dear Sir:

You will recall an extensive investigation which you conducted for this company several years ago as to the air hygiene aspects of fiberglas.

We have now in the pilot plant stage a new material regarding which we need some guidance as to what is indicated as necessary from that same standpoint. The material is a hydrous calcium silicate.

Silica of 200 mesh per inch and finer is incorporated with calcium hydroxide in a water suspension. After sufficient preliminary reaction to convert a portion of the reactants to a gelatinous form of such consistency as to suspend the remainder of the reactants and avoid settling, the material is poured into molds which are then placed in a steam cylinder similar to those commonly used in the manufacture of sand lime brick and subjected to 125 lbs. per square inch pressure of steam and its resultant temperature for approximately ten hours. During this time a crystallization occurs although the material is still wet when removed from the cylinder. It is then dried and yields a porous mass which can be sawed like lumber.

It is intended to use this material for certain interior structural uses, also as an industrial thermal insulating material for pipe, etc.

The material contains no free calcium hydroxide but does contain a very slight amount of unreacted silica, presumably the larger particles of silica which have persisted while the available calcium hydroxide has been consumed in the formation of the hydrous calcium silicate.

The following points merit consideration:

1. - Does the hydrous calcium silicate of itself constitute any air hazard from an air hygiene standpoint?

2. - Are the few residual particles of silica of such size and frequency as to constitute a hazard?

3. - It should be considered from the standpoint of employees working in the plant where the material is made or where it may be sawed to desired dimensions, and also considered from the standpoint of applicators or erectors at the point of use.

S C1001 m-234

CRMC-Motley1000-Subj-001382

Published by AsbestosClaims.Law
asbestosclaims.law/library/13179/1

OWENS-ILLINOIS GLASS COMPANY

Dr. L. U. Gardner,
Saranac Lake, New York.

February 12, 1943

We are forwarding to you by mail two samples - one which will represent the material which collects in our dust-collecting system, and the other represents material, presumably finer, which has settled from the atmosphere in a finishing room where cutting of the material is done.

We would like to have your opinion tentatively as to the situation for our present needs and your suggestion as to a suitably comprehensive program to permit a final determination of its status.

The writer recalls very pleasantly having lunch with you and Mr. Walters at Baltimore a few years ago during a meeting of the American Ceramic Society.

Very truly yours,

U E Bowes

Director of Research

U. E. Bowes
jf

cc - Mr. A. C. Firth
Mr. M. K. Olander
Mr. H. H. Renn
Mr. David Innes - Berlin

S 00002

CRMC-Motley1000-Subj-001383

Published by AsbestosClaims.Law
asbestosclaims.law/library/13179/2