

SEE DISTRIBUTION

R.D.Savage

June 19, 1974

PROPOSED OSHA STANDARD ON VCM EXPOSURE

Attached is a copy of a letter mailed last week to domestic PVC customers. It describes the order of magnitude of residual VCM in our Geon resins, as well as environments where VCM might tend to concentrate.

You should keep this letter for reference. In addition, all BFG sales operations outside the U.S. handling Geon PVC products should be sent a copy of this letter for their information. This should be attended to promptly.

U.S. Government hearings on the proposed standard for residual VCM' will take place in Washington June 25.

RDS/cak

Attachments

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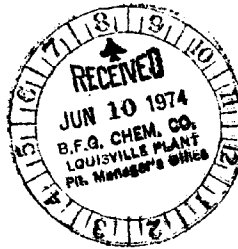
cc: A.L.Hatfield
J.M.Reese
B.I.Pfister
R.E.Martin
C.R.Flynn

24718001

BFG34023

BFG34024

May 30, 1974



B.F. Goodrich Chemical Co.
P.O. Box 954 Bells Lane,
Louisville, KY. 4021
U.S.A.

Gentlemen :

We read in an article which came out in the Chemical Marketing Reporter, and in the Wall Street Journal about the outbreak of liver cancer to workers of several PVC manufacturers.

Being a local PVC manufacturer, we are very much interested in knowing the precautions you are presently observing in your PVC plant, your methods of monitoring VC gas, your method of handling and testing VC monomer, etc.

We are also interested in any literature regarding the dangers involved in the production of vinyl chloride and PVC.

Thank you for your assistance.

Very truly yours,


ESTEBAN R. CHANCO
Project Research Superintendent

ERC/arv

BFG34025

24718003

MABUHAY VINYL CORPORATION
SUITE 501 MADRIGAL BLDG., AYALA AVENUE, MAKATI, RIZAL, PHILIPPINES
P. O. BOX 1356 MANILA CABLE ADDRESS: FILVINYL MANILA TEL. 88-66-91

Inter-organization Correspondence

BFGoodrich

TO	All Product Managers & Product Engineers D/5401	FIELD POINT OR AKRON DEPARTMENT & BLDG. NO.	DATE YOUR LETTER
FROM	JEAN F. MALONE	FIELD POINT OR AKRON DEPARTMENT & BLDG. NO.	DATE THIS LETTER 6/11/74
SUBJECT	OSHA Proposed Permanent Standard for Exposure to Vinyl Chloride Monomer		

Attached is a copy of letter being mailed to customers today. The first page of all the mailings will be the same but there are three different second pages and the mailing will go to three separate customer lists depending on which products they purchase.

Let me know if you have any questions.

Jean F. Malone
Jean F. Malone

ez
Attachments

CC: R. D. Savage
R. E. Martin

2471 8004

BFG34026



B. F. Goodrich Chemical Company

A DIVISION OF THE B. F. GOODRICH COMPANY

6100 OAK TREE BOULEVARD • CLEVELAND, OHIO 44131 • PHONE: 216-524-0200

June 4, 1974

Gentlemen:

To assist in our consideration of The Occupational Safety and Health Administration (OSHA) proposal described in our letter to you of May 30, 1974, we should like to offer additional information on vinyl chloride monomer currently remaining in our polymer products at the time of manufacture.

The Occupational Safety and Health Administration (OSHA) announced on April 5, 1974, an Emergency Temporary Health Standard for exposure to vinyl chloride (Federal Register, Vol. 39, No. 67, April 5, 1974, pp. 12342-44). This emergency standard established an exposure ceiling of 50 parts per million (ppm) in air for vinyl chloride (VC). OSHA, in paragraph 1910.93q of the subject standard, has set down temporary in-plant monitoring requirements for ambient air for employee protection. On May 10, 1974, OSHA published a Proposed Permanent Standard for Exposure to Vinyl Chloride Monomer limiting the allowable exposure to a "non-detectable" level.

As PVC is manufactured in the industry today, detectable quantities of vinyl chloride monomer remain in resins and compounds. While this may not result in detectable quantities in the general atmosphere in your plant, there are conditions under which residual monomer may accumulate to measurable amounts. Since the monomer is volatile, it is released from the resin gradually in storage and more rapidly under heat and further processing. It is the intent of this letter to indicate the order of magnitude of the trace amounts of residual vinyl monomer presently in our products at the time of manufacture and also to point out potential areas of accumulation. We are working diligently to reduce these trace amounts and progress is constantly being made, but time will be required to implement improved technology and equipment to reach the desired goal.

General Purpose Resins

102EP F-5, 103EP, 140X30

103EP F-76, 80X5
430X30, 300X6

Average Amount of
Residual Monomer

<0.0050% (50 ppm)

<0.0150% (150 ppm)

Continued.....

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<u>Dispersion & Super EP Resins</u>	<u>Average Amount of Residual Monomer</u>
120 Series, 130 Series, 90 Series	<0.0025% (25 ppm)
<u>Compounds</u>	
Flexible	<0.0010% (10 ppm)
Rigid	<0.0100% (100 ppm)
Other miscellaneous resins vary, usually being higher than any of the above.	

Analysis has shown that areas where vinyl monomer might concentrate are:

1. Enclosed containers such as bulk railcars, bulk trucks, and storage tanks. The air space above the resin should be purged and monitored for vinyl monomer or adequate protection provided prior to exposure of personnel.
2. Intensive compound mixing operations under heat. Suitable exhaust ventilation should be provided.

Appreciable concentrations are less likely to occur in other processing operations such as extrusion, molding, and calendering; but proper ventilation should be maintained around all hot processing equipment. Normal, good operating practice in exhausting volatiles may be sufficient, but should be confirmed by measurements.

The concentration of vinyl chloride at the currently mandated exposure limits cannot be detected by odor so that suitable test equipment and methods must be used as indicated in the Temporary Standard and Procedure (OSHR Vol. 3, No. 44, April 4, 1974). Copies are available at our field sales offices.

Intense technical efforts by us and others in the industry are resulting in a rapidly changing situation. As additional information becomes available, we will certainly be in touch with you.

Cordially yours,

Jean T. Malone
Director of Plastic
Products Management

JFMalone/ez

BFG34028

24718006

	<u>Average Amount of Residual Monomer</u>
<u>Dispersion & Super EP Resins</u>	
120 Series, 130 Series, 90 Series	<0.0025% (25 ppm)
<u>Compounds</u>	
Flexible	<0.0010% (10 ppm)
Rigid	<0.0100% (100 ppm)
<u>Blending Resins</u>	
140X30	<0.005% (50 ppm)
202	<0.170% (1700 ppm)

Other miscellaneous resins vary, usually being higher than any of the above.

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Cordially yours,

Jean F. Malone

Director of Plastic
Products Management

JFMalone/ez

BFG34029

24718007

Average Amount of
Residual Monomer

Dispersion & Super EP Resins

120 Series, 130 Series, 90 Series Φ.0025% (25 ppm)

Compounds

Flexible Φ.0010% (10 ppm)
Rigid Φ.0100% (100 ppm)

Soluble Resins

427 Φ.08% (800 ppm)
222 Φ.75% (7500 ppm)

Other miscellaneous resins vary, usually being higher than many of the above.

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Cordially yours,

Jean F. Malone
Director of Plastic
Products Management

JFMalone/ez

BFG34030

24718008