

MAR 12 REC'D

NJH OFM

FEB 20 2 26 PM '74

B.F. Goodrich Chemical Company

A DIVISION OF THE B. F. GOODRICH COMPANY

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

EDWARD S. OSBORNE
DIVISION VICE PRESIDENT, MARKETING

February 6, 1974

National Institute of Health
Claims Review Section, OFM
Bldg. 31, Room B1B-10
Bethesda, Md. 20014

Dear Sir:

Last week we sent to you a public statement by The B.F. Goodrich Company concerning our investigation of the deaths of three employees at our Louisville, Kentucky plant from a rare form of liver cancer, and the possible connections between these deaths and their work over a number of years in our PVC polymerization operations.

Later search of available medical records revealed that a fourth employee had died from the same cause, angiosarcoma of the liver, in 1968. Our public statement on this case is enclosed.

At the time of issuing our first statement on January 23, B.F. Goodrich provided all data we had at that time to the Kentucky Department of Labor, representative of the Federal Occupational Safety and Health Administration (OSHA) and to the National Institute of Occupational Safety and Health (NIOSH). These agencies are currently investigating these cases, are carrying out industry-wide epidemiological studies, and are in contact with European governments with major PVC industries. We are continuing to co-operate fully with these agencies.

Also cooperating with the government are 19 producers of vinyl chloride monomer and PVC under sponsorship of the Manufacturing Chemists Association, 1825 Connecticut Ave., N. W., Washington, D. C. 20009. This group is sponsoring lengthy and in-depth toxicological and epidemiological studies on vinyl chloride and workers.

OSHA has called a hearing to investigate this subject further. For your information, we are enclosing a copy of the Federal Register,

BFG22740

24653001

page 3874, January 30, announcing this hearing. One of the stated purposes of this hearing is to determine whether OSHA should issue revised work standards.

As yet no definite connection has been established between these four angiosarcoma cases and any of the some 50 chemicals which may have been used in polymerization of PVC or its compounds at our Louisville plant. Vinyl chloride monomer, a chlorinated hydrocarbon, is a primary suspect due to the fact it is a major raw material of high volatility to which our employees have probably had the greatest exposure. It should be pointed out that searches of medical records at our other five plants have revealed no similar cases, and no others in the United States have been reported.

As you may know, some residual unpolymerized vinyl chloride monomer remains in commercial polyvinyl chloride polymers and compounds. The levels in Geon resins, plastics and latexes range from virtually undetectable levels to those high enough to suggest the possibility of detectable vapor concentrations in closed storage or in some processing steps, such as heated mixing equipment.

B.F. Goodrich is not in a position to recommend specific precautions for your manufacturing operations. However, we believe you will want to review your own procedures and take appropriate action.

We would like to point out that the present investigations are confined to polymerization operations, where the amount of vinyl chloride, the starting monomer, is much higher than it would be in any process we know involving finished polymer or compounds. In our plants we have reduced exposure to levels below 50 ppm of vinyl chloride.

It is not the intent of this memorandum to state that the cause of angiosarcoma of the liver is exposure to vinyl chloride monomer but to point out to our customers that small, variable amounts of this raw material remain in the polymer in unchanged form and that it is one of the suspected chemicals.

We will do our best to keep you informed on this subject as investigations proceed.

Sincerely yours,



E. B. Osborne/ja

BFG22741

22833002

For immediate release

LOUISVILLE, Jan. 29 -- B.F. Goodrich has received, at its request, a preliminary report indicating that the cause of the 1968 death of a former employee here has been tentatively identified as angiosarcoma of the liver.

The cause had previously been reported to the Company as an unspecified type of cancer of the liver.

As part of its continuing intensive investigation of available medical data, the Company last week requested a review of the findings from an autopsy that was performed at the time.

Identification of angiosarcoma as a cause of death can only be determined by autopsy or from hospital records when surgery is performed and a pathological examination of the affected organ is made and reviewed.

The Company has virtually completed a preliminary review of insurance death records of all former employees in PVC operations. To date no similar cases have been found. A program of medical tests for all other employees is in progress. The Company will voluntarily provide to the National Institute of Occupational Health and Safety and the Kentucky Department of Labor any significant new information as it develops.

-0-

1-2974

BFG22742

22833003

NOTICES

(6) Whether the available information warrants the issuance of an Emergency Temporary Standard, or the commencement of a regular rulemaking under section 6(b) of the Occupational Safety and Health Act.

Written data may be mailed or delivered to the Office of Standards, Attn: Docket OSH-36, Occupational Safety and Health Administration, Room 203, 1726 M Street NW, Washington, D.C. 20210, not later than February 28, 1974. The data will be available for public inspection and copying at the OSHA Public Reading Room, Room 203, 1726 M Street NW, Washington, D.C. 20210.

Oral presentation of data will also be received by an administrative law judge at an informal fact-finding hearing beginning at 10 a.m., e.d.t., on Friday, February 15, 1974, Conference Room B, Detachment Auditorium, Constitution Avenue NW, between 12th and 14th Streets, Washington, D.C.

Persons desiring to appear at the hearing must file with J. Goodell, Attn: Docket OSH-36, Office of Standards, Occupational Safety and Health Administration, Room 203, 1726 M Street NW, Washington, D.C. 20210, a written notice of intention to appear, in triplicate. Notice should be filed as soon as possible, but will be accepted by the Management Officer at the hearing until the pre-hearing conference begins. The notice should state: The name and address of the person wishing to appear; the capacity in which he will appear; and the approximate amount of time required for the presentation. The notice should also include, or be accompanied by, a brief statement of the presentation to be made.

Beginning at 9:30 a.m., e.d.t., on February 15, 1974, the presiding Administrative Law Judge will hold a pre-hearing conference in order to establish the order and time for the presentations, and in order to settle any other matter relating to the proceedings.

The oral proceedings shall be reported verbatim. The use of prepared statements by witnesses is encouraged. All documents that are intended to be submitted should be submitted in triplicate (original and two copies).

The administrative law judge shall have all the powers necessary or appropriate to conduct a fair and full informal hearing, including the powers:

- (a) To regulate the course of the hearing;
- (b) To dispose of procedural requests, objections, and comparable matters;
- (c) To confine the presentations to matters pertinent to the requested information;
- (d) To regulate the conduct of those present at the hearing by appropriate means;
- (e) In his discretion, to question and permit questioning of any witness; and
- (f) In his discretion, to keep the record open for a reasonable stated time to receive written data from any person who has participated in the oral proceeding.

Following the close of the hearing, the

presiding officer shall certify the record thereof to the Assistant Secretary of Labor for Occupational Safety and Health.

Signed at Washington, D.C., this 23rd day of January 1974.

JOHN H. STENGER,
Assistant Secretary of Labor.

(PR Doc. 74-2804 Filed 1-25-74; 8:15 am)

DEPARTMENT OF LABOR

Office of the Secretary

POSSIBLE HAZARDS OF VINYL CHLORIDE
MANUFACTURE AND USERequest for Information and Notice of
Fact-Finding Hearing

Notice is hereby given that the Occupational Safety and Health Administration is requesting information on possible hazards associated with the manufacture and/or use of vinyl chloride (chloroethene, Chemical Abstracts Service Registry Number 73014).

The Administration requests information including, but not necessarily limited to:

- (1) The toxicity of vinyl chloride;
- (2) The toxicity of other chemicals involved in the manufacture and use of vinyl chloride;
- (3) The technologies involved in the production and use of vinyl chloride;
- (4) Employee populations potentially or actually exposed to vinyl chloride or other chemicals, and involved in the production and/or use of vinyl chloride;
- (5) Epidemiological studies of effects of vinyl chloride and other chemicals used in the manufacture or use of vinyl chloride on populations, employee or otherwise; and

ILLEGIBLE DOCUMENT

BFG22743

22833004

Placed call, left word
2/27, 3 PM.

Talked 2/28 - PS
will send draft of
article.

Bob Downey

Yesterday, February 26, Peggy Schmidt, PLASTICS TECHNOLOGY,
212-986-4800, Ext 269, in New York, called and said she was working
on an article for April issue. She had the following questions:

How does BFG view the pricing situation currently, how about
rest of year, next five years?

Has BFG raised prices since decontrol?

At what capacity is Goodrich operating? And any comments on rest
of industry. What about projections on BFG capacity for rest
of 1974 and possibly next five years?

Any comment on availability of feedstocks. She says prices seem to
depend upon availability of feedstocks.

She is questioning makers of PVC, polypro, polyethylene, and polystyrene.

She would like to get an answer this week as her deadline is next week. She would
prefer to talk to someone in authority with the answers as she may have more specific
questions upon what is said. I told her that someone would get back with her
before Friday.

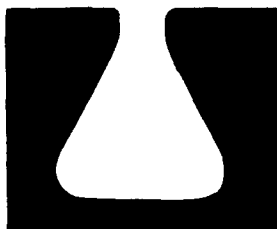
Words for Malone
% increase?
3-4 cents / lb.

15-20%
PVC products

J. Follick

BFG22744

22634001



Epcar[®]
ELASTOMERS

100.006

APPLICATION FORMULARY

GENERAL-PURPOSE MOLDING COMPOUND

ASTM D 2000 LINE CALL OUT

3BA620
A13B13B14

RECIPE

Epcar 545	100.0
N-330, HAF black	80.0
Zinc oxide	5.0
Stearic acid	1.0
Flexon 766	40.0
TMETD	1.5
Tetrone A	0.6
Sulfasan R	1.5
Sulfur	0.4
Total	230.0

COMPOUND PROCESSING PROPERTIES

Compound Mooney, ML-10, 212°F	54.0
-------------------------------	------

VULCANIZATE PROPERTIES, Cured 20 Minutes, 320°F

	Original	Oven Aged 70 hours, 100°C
Stress-Strain		
Tensile strength, psi	2390	2400
Elongation, %	430	335
300% Modulus, psi	1520	2250
Shore A2 Hardness, pts	62	69
Compression Set, Method B, plied		
22 hours at 158°F, %	23.0	
22 hours at 212°F, %	30.0	
(Molded plug, cured 28 min.)		
22 hours at 158°F, %	13.0	
22 hours at 212°F, %	20.0	
Tear Resistance, ASTM D 624, ppi		
Die B, w/grain	300	
Die C, a/grain	185	
w/grain	185	

BFG22745

B.F. Goodrich Chemical Company / 3135 Euclid Avenue., Cleveland, Ohio 44115 / A division of



These data are based on tests believed to be reliable. They are given only for your information and no warranty, express or implied, is made as we cannot guarantee the results of operations not under our direct control. The information in this publication is not intended as permission or recommendation to practice a patented invention without permission of the patent owner.

7102-AA

22834002