

cc: V. Labrecque
S. M. Lillis

June 18, 1969

File

Mr. S. Sebastian
Philip Carey Corporation
320 South Wayne Street
Cincinnati, Ohio 45215

Dear Van:

We have recently received a shipment of asbestos B. T. board (Formula 6564) from Linden. The enclosed sample is used as a wrapper for this material, and we would like to know what it is. Nobody here has seen it before and we wonder if this is something you were working on while you were at Linden.

We would appreciate an early response to this inquiry.

Very truly yours,

VICTOR GASKET DIVISION
DANA CORPORATION

Ch
Carl I. Hayden
Materials Development Laboratory

CIH:pt

Enclosure

VPD-153-0002536

DANA-140

cc: V. J. Labrecque
S. M. Lillis
H. W. Gosselink
G. M. Brown
D. J. Reda

April 16, 1969

To: W. J. Sheehan
From: C. I. Hayden

SUBJECT: PACKINGS - Supplier
SMITH & KANZLER

re: Disposition of old 6506

We have reviewed the history of the 7,000 pounds of 6506 currently located in Plant 2 area. We find this material was produced in May of 1966. This would mean that this material represents the first experimental production of this material at Smith & Kanzler and is not the formulation as is being run currently.

This is further complicated by the fact that the material being three years old is rapidly approaching the normal limits of its shelf life. In April of 1968 correspondence was issued from this Laboratory recommending that this material be scrapped. Based on the above information, we see no reason to alter our position. Material of this age and of this history would certainly constitute a considerable risk in operating reliability of the gasket.

Just prior to the vacation shutdown in the summer of 1967, Messrs. Reda, Winchester, and Hayden reviewed all unused rolls of 6506 which had not been considered acceptable. The decision was made at that time to scrap all of these rolls at our own expense since it was not possible to determine which we had paid for and which had been received on consignment. It is quite possible that the rolls currently under consideration are a part of that lot of material, and for reason or another never physically scrapped - although the material had been written off the books. Mr. Reda's participation in this was advisory with regard to the procedure to be used for scrapping such a large quantity of material. However, he may be able to tell us if the material in question is a part of the material to be scrapped in 1967. If it is, we have already absorbed the scrap charge. Please contact the writer if you would like to discuss this matter more fully.

Materials Development Laboratory

CH
C. I. Hayden

CLH:pt

VPD-153-0002537

421
April 16, 1969

Mr. Van Sebastian
Smith & Kanaler Company
1414 East Linden Avenue
Linden, New Jersey 07036

Dear Van:

Enclosed are several small samples of material cut from one lot of 6222. The roll numbers have been lost, but it is believed that material was produced in mid-January. You will note considerable quantities of foreign material and asbestos. This contamination results in high scrap rates both in gaskets as produced from the material as is and also in the densified version produced as we calender.

Please initiate any action necessary to prevent recurrence of this problem.

Very truly yours,

VICTOR GASKET DIVISION
DANA CORPORATION


Carl I. Hayden
Materials Development Laboratory

CIH:pt
Enclosures

cc: V. J. Labrecque
J. A. Johnson
W. D. Weedon

VPD-153-0002538

cc: V. J. Labrecque
G.M. Brown

April 3, 1969

Feb
To: T. Sexton

From: C. I. Hayden

SUBJECT: ASBESTOS - B. T. Board
SMITH & KANZLER

re: Experimental High Gauge
Asbestos B. T. Board

In November of 1968, four rolls of B. T. board, Purchase Specification #564, were obtained from Smith & Kanzler to evaluate material having a basis weight above that shown in the Purchase Specification. These rolls were charged to the Materials Development Laboratory Department 251 on Smith & Kanzler's invoice #23261. This material, less about 10 square yards taken for Laboratory evaluation, has been used to fill production orders. We request that Department 251 be credited with the cost of this material, and the charges be re-assigned to the appropriate manufacturing area.

Materials Development Laboratory

CH
C. I. Hayden

CIH:pt

VPD-153-0002539

cc: V. J. Labrecque
J. A. Johnson

March 18, 1969

File

To: S. M. Lillis

From: C. I. Hayden

SUBJECT: ASBESTOS - Millboard
SMITH & KANZLER

RE: Use of Calendered Board

We have examined the applications for uncalendered asbestos millboard and find that we can use a calendered board of the same basis weight as replacement. There are some problem areas which will need resolution, but these do not appear to be difficult. The lowest basis weight we use is 4.7 to 5.9 grams/sq.dcm. The highest weight we currently use is 27.8 to 30.2 grams/sq.dcm. Due to Smith & Kanzler machine limitations, a laminated sheet will be needed for the higher weights.

We are currently examining samples of the most recent run of millboard from Smith & Kanzler. If these tests show adequate physical properties as compared to our #70 millboard, then action will be initiated for another experimental trial. This trial will aim to produce the following materials:

1. Basis weight 4.9 to 5.9 grams/sq.dcm.
2. Basis weight 10.5 to 11.6 grams/sq.dcm.
3. Establish maximum basis weight which can be produced without lamination.
4. Produce one coil of laminated stock - probable basis weight to be 25.4 to 27.4 grams/sq.dcm.

In order to achieve parallel materials when comparing gaskets made with our millboard compared to Smith & Kanzler, some basic points must be considered.

1. Considering the only basis weight for which we have Smith & Kanzler experience, we find a large gauge difference when compared to our current board.

<u>Smith & Kanzler Gauge</u>	<u>Victor Calender</u>	<u>Victor Uncalendered</u>
.045"/.050"	.055"/.060"	.065"/.070"

VPD-153-0002540

2. This means that where we now use .065"/.070" board in CORBESTOS applications (which is our uncalendered use), we would use .045"/.050" Smith & Kanaler board.
3. Where we now use .055"/.060" Victor calendered board in layer gaskets, we would have to retain the gauge resulting in increased basis weight. This is necessary because the mill-board in a layer gasket is a spacer, and gauge must be maintained.

The latest samples from Smith & Kanaler showed two areas of difficulty, neither of which is complex, but both require correction. First, the compressibility is running a little high - 18% against 15% maximum. Second, the felt mark on the sheet is excessive and can be detected through copper facing. However, since the pressing felt was used here, and it can be removed (as it is for ASBESTOPRENE) correction of both these problems should be accomplished by removing this felt and increasing wet calender pressure. This may result in a slight reduction in gauge which our investigation shows will not be a problem.

To summarize, we require a full range of basis weights from 4.9 to 5.9 grams/sq.dcm. up through 27.8 to 30.2 grams/sq.dcm. The exact ganges for each basis weight will be established with a production trial if the remaining tests show favorable results. Felt mark must be reduced, and can be with machine adjustments already being used for ASBESTOPRENE. Maintenance of gauge in layer gaskets will require higher basis weight material than is now being used. This will result in some change in cost on parts involved.

Materials Development Laboratory


C. I. Hayden

pt

VPD-153-0002541

SMITH & KANZLER COMPANY

Manufacturers of Asbestos Products and Spraycraft Materials

1414 EAST LINDEN AVENUE, LINDEN, N. J. 07036

March 7, 1969

Mr. Carl Hayden
Victor Division-Dana
5750 W. Roosevelt Road
Chicago, Illinois

Dear Carl:

As part of our continuing effort to improve the tensile strength of 6222 gasket, especially .058 - .066 caliper, we conducted a handsheet study to determine the effect of a small addition of Vanderbilt's Butyl Zimate to current formulation, the intention being to accelerate the heat curing process of the rubber.

Our finding is that the addition of 1.5 parts Butyl Zimate to 100 parts rubber produced a sheet with 20-30% more tensile strength over a standard sheet. This seems especially true during the early stage of heat curing. Simultaneously we observed a slightly greater tendency of the sheet to crack upon flexing compared to a standard one.

We are interested in checking this out in actual production run. The test will comprise addition of Butyl Zimate to 5-6 batches of the next run of .058-.066 caliper 6222.

If you agree with us, please give your permission to do so.

Very Truly again,

S. Sebastian
S. Sebastian

VPD-153-0002542

File

WABASH

5-2100

*Attached to
note CH to Van S.
dated 3/6/69.
CA
1/12*

cc: C. I. Hayden

March 6, 1969

File

To: V. Labrecque

From: J. Larsen

SUBJECT: ASBESTOPRENE 233

re: Smith & Kanzler
Flexibility

The flexibility was run by C. Bacsinskas of Department 244 on the four variations you submitted for test, and no difference was found except for the ones with added accelerators. It seemed a little worse. The % binder additions could not be detected in the flexibility.

Materials Development Laboratory

J. Larsen
J. Larsen

pt

Enc. 3/3/69

VPD-153-0002543

cc: V. Labrecque ✓
H. Dehr

March 6, 1969

File
To: S. M. Illis

From: J. Larsen

SUBJECT: ASBESTOPRENE 233
SMITH & KANZLER ✓

re: Low Tensile Strength Material

The curing of the ASBESTOPRENE 233 sent from Plant #4 has been completed. The skids of material were tested for tensile by Department 244 and found satisfactory.

Materials Development Laboratory

J. Larsen
J. Larsen

pt

Dic. 3/3/69

VPD-153-0002544

cc: V. J. Labrecque
S. M. Lillis
J. A. Johnson

March 6, 1969

File

Mr. Van Sebastian
Smith & Kanaler Company
1414 East Linden Avenue
Linden, New Jersey 07036

Dear Van:

Confirming our telephone conversation of March 3, 1969, we have agreed to the following experiment on 6222 in .058"/.066" gauge:

Add Butyl Zimate, 1.0 phr
to three batches

Add Butyl Zimate, 1.5 phr
to three batches

You will be sending samples to us for evaluation.

Samples of material made with extra Methyl Tuads were examined and show an improvement in tensile strength when compared with standard production sample, (1100 psi increased to 1300 psi). Samples made with increased binder showed no improvement in flexibility characteristics.

Congratulations on the new daughter. I was glad to hear about her and that she and your wife are doing well.

Very truly yours,

VICTOR GASKET DIVISION
DANA CORPORATION

CH
Carl I. Hayden
Materials Development Laboratory

pt

VPD-153-0002545

cc: V. J. Labrecque
S. M. Lillis
L. W. Winchester
L. S. Dymitro

February 28, 1968

To: H. G. North

From: C. I. Hayden

SUBJECT: PURCHASE SPECIFICATIONS
SMITH & KANZLER

re: Tentative P. S. #564

Attached are two copies of Tentative P. S. #564 reflecting a change in roll size. Roll weights have been adjusted to show minimum weight per inch of coil width. This should compensate for lighter weights which will accompany narrower widths.

Please submit to our source for comments and/or approval.

Materials Development Laboratory

C. I. Hayden

pt

VPD-153-0002546

VICTOR DIVISIONS - DANA CORPORATION
PURCHASE SPECIFICATION

Tentative P. S. #564

February 28, 1968

Supersedes issue of
September 28, 1965

TREATED ASBESTOS PAPER

DESCRIPTION:

This material is to be produced from selected long fiber asbestos treated with an organic binder, per Formula #6564.

QUALITY:

The product is to be relatively free from fiber clusters, foreign matter and surface defects.

Samples of material of desired appearance are to be retained by Victor and the supplier as part of this specification.

PHYSICAL PROPERTIES:

Tests are to be made in accordance with methods outlined in ASTM D 1170-62T.

1. Caliper vs. Basis Weight:

Caliper Range	Basis Weight Range (lbs./500 sq. ft.)	Square Decimeter Weight (grams)
over .013" to .018" incl.	over 31 to 38 incl.	2.9 - 3.6
over .018" to .023" incl.	over 41 to 48 incl.	3.9 - 4.6
over .023" to .028" incl.	over 51 to 58 incl.	4.9 - 5.6
over .028" to .033" incl.	over 61 to 68 incl.	5.9 - 6.6
over .033" to .038" incl.	over 71 to 78 incl.	6.9 - 7.6
over .038" to .043" incl.	over 81 to 88 incl.	7.9 - 8.6
over .043" to .048" incl.	over 91 to 98 incl.	8.9 - 9.6
over .048" to .053" incl.	over 98 to 105 incl.	9.6 - 10.3

2. Tensile Strength:

With Machine Direction - 500 psi. min.
Cross Machine Direction - 275 psi. min.

3. Compressibility at 1000 psi.: 15 - 30%
4. Recovery after 1000 psi.: 20% min.
5. Loss on Ignition: 30% max.
6. Water Absorption: 35% max.
7. Immersion (2 hours in Boiling Water): No disintegration
8. Moisture Content when shipped: 3% max.

VPD-153-0002547

February 28, 1968

SHIPPING INSTRUCTIONS:

▽ **Roll Size:** Rolls shall have a maximum diameter of 48" and a maximum weight of 2,000 pounds. Minimum roll weight shall be 41 pounds per inch of roll width. Up to 5% of the rolls in any given shipment will be accepted with a minimum weight of 400 pounds.

Roll Width: As specified on order, with a minus 0 to plus 1/8" tolerance.

Paper Core: 3" I. D.

Pallets: Wood with steel strapping.

Roll Markings to include: Supplier's name
Victor-Dana Order No.
Victor-Dana Spec. No.
Victor-Dana Formula No.
Caliper Range & Basis Wt. Range
Net Roll Weight
Date of Manufacture
Roll No.

▽ **Indicates change.**

RECOMMENDED SOURCE: Smith & Kanaler Company

VPD-153-0002548

cc: V. J. Labrecque ✓
S. M. Lillis
H. W. Gossalink
G. M. Brown
D. J. Reda

July 10, 1969

file
To: W. J. Sheehan

From: C. I. Hayden

SUBJECT: PACKINGS - Supplier
SMITH & KANZLER ✓

re: Disposition of Old 6506
Letter C. I. Hayden to
W. J. Sheehan dated 4/16/69

In the above correspondence we recommended that the 7,000 pounds of old 6506 currently located in Plant #2 be scrapped. There was some question as to whether or not this was really necessary and with the cooperation of the Control Laboratory we have developed some information on the subject.

It will be noted in the reference letter that this material being representative of the first made at Smith & Kanzler was probably of a slightly different formulation than is currently being produced. Heat aging at 250°F. in comparison with Armstrong AN-675 and new production 6506 sharply shows this difference. Our standard materials readily withstand exposure to 300°F. and remain pliable and resilient. The old material becomes very stiff and brittle at 250°F. This is a characteristic which would evidence itself in hardening of the gasket material leaving it non-resilient. Such a condition can and has resulted in leakage failure in some of our gaskets.

Based on this, we still feel that this material should be scrapped.

Materials Development Laboratory

C.I.
C. I. Hayden

GER:pt

VPD-153-0002549

cc: C. I. Hayden
H. W. Gosselink

August 22, 1969

File
To: C. M. Brown

From: V. Labrecque

SUBJECT: ASBESTOS - B. T. Board

re: Lack of Flexibility in
Smith & Kanaler 6561 Board

We have reviewed the problem you are having with breakage when running the above material on the In-Line equipment. We feel that a flexibility requirement must be added to the Purchase Specification in order to eliminate this condition.

In order to do this, we have asked H. Gosselink to record the flexibility of all incoming Smith & Kanaler material and indicate which actually are not satisfactory on the In-Line equipment. Based on this, we will determine the minimum flexibility that can be tolerated and revise the Purchase Specification accordingly.

By copy of this note, we ask that Mr. Hayden and Mr. Gosselink cooperate in correcting this complaint.


VL:pt

VPD-153-0002550

File

September 17, 1969

Philip Carey Company
1111 East Linden Avenue
Linden, New Jersey

Attention: Mr. S. Sebastian

Dear Van:

A meeting was held on September 16, 1969, with Messrs. Wittman, Smith, and Newton of Philip Carey and Messrs. Brown, Gosselink, and Hayden of VICTOR regarding your request to increase the amount of 6002 fiber in Formula 656L. It was agreed by all that an increase in 6002 fiber - at Philip Carey expense, would be accepted as a temporary means of relieving the production bind.

This deviation will hold for material produced from now to October 1, 1969. Should an extension be required, the subject will be reviewed again.

Very truly yours,

VICTOR GASKET DIVISION
DANA CORPORATION

CH
Carl I. Hayden
Materials Development Laboratory

pt

cc: V. Labrecque
G. Brown
H. Gosselink

VPD-153-0002551