LOG # 169

LABORATORY DATA SHEET

For J. LARSEN

SUBJECT VICTOPAC 65 - P-5 Center **DATE** DECEMBER 1, 1976

re: RUSSIAN ASBESTOS.	# 1	# 2	ENG.SPEC # 209
THICKNESS	.0305"	.031"	.026"/.036"
DENSITY#/ft.^{3}	121.7	120.6	120 min.
% COMPRESSIBILITY @ 1000 psi	5.4	5.7	2 - 7%
% RECOVERY after 1000 psi.	60.4	57.1	40% min.
% COMPRESSIBILITY @ 5000 psi.	11.9	11.8	5 - 15%
% RECOVERY after 5000 psi.	66.2	66.7	40% min.
TENSILE STRENGTH	2027	2002	2400 psi.min.
ASTM OIL # 3, 5 hr. @ 300°F			
% COMPRESSIBILITY @ 5000 psi	18.5	19.8	30% max.
% TENSILE LOSS	33.6	22.4	40% max.
% THICKNESS INCREASE	14.7	15.1	15 - 30%
ASTM FUEL "B", 5 hr.@ 70-85°F			
% WEIGHT INCREASE	11.0	10.1	30% max.
% THICKNESS INCREASE	11.9	10.8	10 - 25%
SEALABILITY, ASTM F 37			
20" Hg -ext.load 300psi.	0.6	0.2	2 ml/hr.max.
% RELAXATION ,ASTM F 38, Method B,22 hr.,3000 psi.			
@ R.T.°	6.5	8.2	15% max.
@ 212°F	12.6	16.2	20% max.
@ 300°F	22.2	21.2	26% max.
@ 400°F	31.3 ✓	33.6 ✓	30% max.

P. Humphrey

TESTED BY J. Hight

VPD-94-0004605

MADE IN USA VG 2233

VPD-94-0004605

LABORATORY DATA SHEET

LOG # 169

For J. LARSEN

SUBJECT VICTOPAC 61 - P-5 Center • **DATE** DECEMBER 1, 1976

	re: RUSSIAN ASBESTOS.				# 3	E.S.# 196
GAUGE					.0275"	.030"/.035"
DENSITY #/ft³					118.8	118 min.
%COMPRESSIB.@1000 psi.					6.0	5 - 10%
% RECOVERY					63.3	40% min.
%COMPRESSIB.@ 5000 psi.					13.3	7 - 17%
% RECOVERY					62.2	40% min.
TENSILE STRENGHT					1925	2000 psi.min.
% COMBUSTIBLES					14.1	
	IMMERSION in ASTM Oil # 3,5 hrs @ 300°F					
%COMPRESSIB.@ 5000 psi.					38.1	30% max.
TENSILE LOSS					33.8	50% max.
%THICKNESS INC.					22.9	15 - 30%
	5 hrs IMMERSION in ASTM FUEL "B" @ 70-85°F					
% WEIGHT INC.					12.9	30% max.
% THICKNESS INC.					13.3	10 - 25%
SEALABILITY(ASTM F37					0.3	5 max ml/hr.
20" HG ext.load 300 psi.						
% RELAXATION ASTM F 38 (Method B)	@ R.T.°F				8.6	16% max.
"	" @ 212°F				14.4	25% max.
"	" @ 300°F				19.4	30% max.
"	" @ 400°F				28.0	35% max.

TESTED BY R. Humphreys

MADE IN USA VG 2233

VPD-94-0004606

VPD-94-0004606

LABORATORY DATA SHEET

LOG # 169

For J. LARSEN

SUBJECT VICTOPAC 60 - P-5 Run through the Bauer- DATE DECEMBER 1, 1976

	Start to Finish. re: RUSSIAN ASBESTOS.	# 4	E.S.# 146
GAUGE		.031"	.026"/.036"
DENSITY #/ft³		117.8	118 min.
%COMPRESSIB.@1000 psi.		7.2	5 - 10%
% RECOVERY		61.4	40% min.
%COMPRESSIB.@ 5000 psi.		13.8	7 - 17%
% RECOVERY		59.0	40% min.
TENSILE STRENGHT		1982	2000 psi.min.
% COMBUSTIBLES		14.5	
	IMMERSION in ASTM Oil # 3, 5 hrs @ 300°F		
%COMPRESSIB.@ 5000 psi.		53.3	30% max.
TENSILE LOSS		37.9	50% max.
%THICKNESS INC.		23.0	15 - 30%
	5 hrs IMMERSION in ASTM FUEL "B" @ 70-85°F		
% WEIGHT INC.		8.8	30% max.
% THICKNESS INC.		13.5	10 - 25%
SEALABILITY(ASTM F37 20" HG ext.load 300 psi.		0.1	5 max ml/hr.
% RELAXATION ASTM F 38 (Method B)	@ R.T.°F	9.8	16% max.
"	" @ 212°F	16.0	25% max.
"	" @ 300°F	21.8	30% max.
"	" @ 400°F	31.3	35% max.

TESTED BY J. Clifford

VPD-94-0004607

MADE IN USA VG 2233

VPD-94-0004607

INTER-OFFICE COMMUNICATION

Log 169

TO: P. Humphrey — OFFICE

FROM J. Larsen — OFFICE

SUBJECT VICTOPAC - Test Results — DATE 11/23/76

MESSAGE: re: Russian Asbestos

Please test these pieces of VICTOPAC made with Russian Asbestos

(1) V 65 - P-5 center
(2) V 65 - P-5 center
(3) V 61 - P-5 center
(4) V 60 - P-5 run through the Baues - Starts - No Finish

SIGNED

REPLY

Test against appropriate ES #1

#1

Tested Per Request

DATE 12-3-76 — SIGNED P. Humphrey & J. Higbe

ZO-8

ORIGINATOR: DETACH THIS COPY. SEND REMAINING SET, CARBON INTACT, FOR USE OF REPLIER.

VPD-94-0004608

VPD-94-0004608

INTER-OFFICE COMMUNICATION

TO: P. Humphrey — OFFICE

FROM J. Larsen — OFFICE

SUBJECT VICTOPAC - Test Results — DATE 11/23/76

MESSAGE: RC: Russian Asbestos

Please test these pieces of VICTOPAC made with Russian Asbestos

(1) V 65 - P-5 Center
(2) V 65 - P-5 Center
(3) V 61 - P-5 Center
(4) V 60 - P-5 run through the Bauer - Starter - No Finish

SIGNED

REPLY

Test against appropriate ES

DATE — SIGNED

PERSON RECEIVING COMMUNICATION - RETAIN THIS COPY FOR YOUR RECORD

20-8

ORIGINATOR: DETACH THIS COPY. SEND REMAINING SET, CARBON INTACT, FOR USE OF REPLIER.

VPD-94-0004609

VPD-94-0004609

69 76

INTER-OFFICE COMMUNICATION

TO: P. Humphrey — OFFICE

FROM: J. Larsen — OFFICE

SUBJECT: VICTOPAC - Test Results — DATE: 11/23/76

MESSAGE: re: Russian Asbestos

Please test these pieces of VICTOPAC made with Russian Asbestos

(1) V 65 - P-5 Center
(2) V 65 - P-5 Center
(3) V 61 - P-5 Center
(4) V 60 - P-5 run through the Baues - Starter - No Finish

SIGNED

REPLY

Test against appropriate ES

DATE | SIGNED

PERSON RECEIVING COMMUNICATION - RETAIN THIS COPY FOR YOUR RECORD

ZO-8

ORIGINATOR: DETACH THIS COPY, SEND REMAINING SET, CARBON INTACT, FOR USE OF REPLIER.

VPD-94-0004610

VPD-94-0004610

LABORATORY DATA SHEET

SUBJECT VICTOPAC 65 **DATE** 11-29-76

Re: Russian Asbestos		ENG. SPEC # 209
THICKNESS	0.31	026/336"
DENSITY #/ft.³	120.6	120 min.
% COMPRESSIBILITY @ 1000 psi	5.7	2 - 7%
% RECOVERY after 1000 psi.	57.1	40% min.
% COMPRESSIBILITY @ 5000 psi.	11.8	5 - 15%
% RECOVERY after 5000 psi.	66.7	40% min.
TENSILE STRENGTH	2002	2400 psi. min.
ASTM OIL # 3, 5 hr. @ 300°F		
% COMPRESSIBILITY @ 5000 psi	19.8	30% max.
% TENSILE LOSS	22.4	40% max.
% THICKNESS INCREASE	15.8	15 - 30%
ASTM FUEL "B", 5 hr. @ 70-85°F		
% WEIGHT INCREASE	10.1	30% max.
% THICKNESS INCREASE	10.8	10 - 25%
SEALABILITY, ASTM F 37		
20" Hg -ext. load 300psi.	0.2	2 ml/hr. max.
% RELAXATION, ASTM F 38, Method B, 22 hr., 3000 psi.		
@ R.T.	~~8.2~~	15% max.
@ 212°F	~~10.9~~ 16.2	20% max.
@ 300°F	~~18.2~~ 21.2	26% max.
@ 400°F	336	30% max.

BINDERS LOSS 14.8
IGNITION LOSS 25.9

TESTED BY Jettont

VPD-94-0004611

MADE IN USA VG 2233

VPD-94-0004611

• Density

Wgt 15.54 Guage 0322 − 0315 − 0315 = 0952 (0317) $\frac{15.54}{0317}$ (.246) = 190.6

Original Compressibility

1000 psi

0660 − 0626 − 0650
0662 − 0624 − 0644
0660 − 0620 − 0640

1982 1870 1934

1870 → 112 = 5.7

1870 → 64 = 5.7.1

5000 psi

0640 − 0568 − 0618
0648 − 0570 − 0621
0648 − 0570 − 0621

1936 1708 1860

1708 → 228 = 11.8

1708 → 152 = 66.7

Oil #3

Wgt

506 − 590
527 − 607

1033 − 1197

1033 → 164 = (15.9)

0317 − 0317 − 0313 = 0946
0322 − 0320 − 0319 = 0320
0325 − 0320 − 0320 = 0636
0320 − 0325 − 0328 = 0606

0316 − 0330
0320 − 0349

0636 6679

0636 → 43

Thickness Reduction
0321 − 0369
0321 − 0370
0642 739 15.1%
642 / 97
(6.8)

Compressibility 5000 psi

0732 − 0588
0730 − 0585
0721 − 0578

2183 1751

1751 → 432 = 19.8

Oil #3 (Tensile)

		Aver	Pull
0314 − 0316 − 0317 =	0316	−	23.7
0315 − 0315 − 0316 =	0315	−	24.6
0313 − 0317 − 0320 =	0317	−	25.4
	948		73.7

2 → 1474 ÷ 948 = 1554

2002 − 1554 = 448 = 22.4 Tensile Loss

Tensile Strength

Original Tensile

	Aver	Pull
0312 − 0316 − 0318 =	0315	− 29.9
0313 − 0315 − 0318 =	0315	− 33.4
0317 − 0309 − 0316 =	0314	− 30.8
	944	941

2 → 1882 ÷ 944 = 2002

Wgt

(I) 15.52
(F) 11.50

BINDER LOSS

11.50 / .87 = 13.22

15.52 − 13.22 = 2.30

15.52 → 230

Ignition Loss

15.52 − 11.50 = 4.02

402 / 1552 = (25.9)

Fuel B

Wgt

518 − 582
526 − 567

1044 1149

1044 → 105 = 10.1

Guage Aver

0320 − 0319 − 0317 = 0319
0320 − 0318 − 0319 = 0319
0350 − 0345 − 0345 = 0347
0350 − 0348 − 0349 = 0349

0319 − 0347
0319 − 0349

0628 0696

0628 → 68 = 10.8

Scalability

10" @ 300°

132 145 03
130 143 02

.2 .2

(.2)

VPD-94-0004612

VPD-94-0004612

Log # 169 ,
for J.L

LABORATORY DATA SHEET

SUBJECT VICTOPAC 60 DATE 11-29-76

Re:	Russian	Asbestos				E.S.# 116
GAUGE					0.31	026036"
DENSITY #/ft³					117.8	118 min.
%COMPRESSIB.@1000 psi.					7.2	5 - 10%
% RECOVERY					61.4	40% min.
%COMPRESSIB.@ 5000 psi.					13.8	7 - 17%
% RECOVERY					59.0	40% min.
TENSILE STRENGHT					1982	2000 psi.min.
		IMMERSION in ASTM Oil # 3,5 hrs @ 300°F				
%COMPRESSIB.@ 5000 psi.					53.3	30% max.
TENSILE LOSS					37.9	50% max.
%THICKNESS INC.					23.8	15 - 30%
		5 hrs IMMERSION in ASTM FUEL "B" @ 70-85°F				
% WEIGHT INC.					8.8	30% max.
% THICKNESS INC.					13.5	10 - 25%
SEALABILITY(ASTM F37 20" HG ext.load 300 psi.					.1	5 max ml/hr.
% RELAXATION	ASTM F 38	@ R.T.°F			9.8	16% max.
(Method B)						
"	"	@ 212°F			16.0	25% max.
"	"	@ 300°F			21.8	30% max.
"	"	@ 400°F			31.3	35% max.

BINDER LOSS 14.5
IGNITION LOSS 25.7

VPD-94-0004613

TESTED BY J. Elliott

MADE IN USA VG 2233

Density

Wgt: 14.60

Guage: 0305 − 0302 − 0309 = 0916 (0305)

$\frac{14.60}{.0305}$ (.246) = 117.8

Original Compressibility

5000psi

0600 − 0519 − 0560
0599 − 0512 − 0562
0600 − 0519 − 0570

1799 1550 1692
1550 1550
249 = 19.8 142 = 89.0

1000 Psi

0617 − 0570 − 0598
0613 − 0570 − 0599
0610 − 0568 − 0592

1840 1708 1789
1708 1708
132 = 7.2 81 = 61.4

Oil #3

Wgt

488 − 595
489 − 594
977 − 1089
977
212 = 21.7

Guage / Aver

0302 − 0300 − 0299 = 0300
0305 − 0306 − 0300 = 0304
0325 − 0325 − 0320 = 0323
0320 − 0318 − 0310 = 0316

0300 − 0323
0304 − 0316
0604 0639
0604
35 = 5.8

Thickness Recheck
0299 − 0367
0301 − 0371 23.0%
738
800
138

Compressibility 5000psi

0738 − 0260
0732 − 0330
0730 − 0337
2000 − 0927
927
1173 = 53.3

Oil #3 (Tensile)

Guage / Aver / Pull

0294 − 0300 − 0300 = 0289 − 19.0
0302 − 0298 − 0299 = 0300 − 18.6
0289 − 0300 − 0300 = 0300 − 17.7
0898 − 55.3
3
1106 ÷ 898 = 1231

1982
−1231
751
751 = 37.9% Tensile loss
1982

Tensile Strength

Guage / Aver / Pull

0298 − 0300 − 0299 = 0299 − 27.7
0300 − 0300 − 0300 = 0300 − 30.7
0299 − 0295 − 0297 = 0297 − 30.4
0896 88.8
2
1776 ÷ 896 = 1982

Original Tensile

Binder Loss

Wgt
(S) 14.57
(F) 10.83

10.83 / 87 = 12.45

14.57 / 12.45 / 2.12

212 / 1457 = (1

Ignition Loss

14.57
10.83
3.74

374 / 1457 = (25.7)

Fuel B

Wgt

476 − 542
481 − 544
957 − 1086
957
129 = 13.5

Guage / Aver

0300 − 0302 − 0295 = 0300
0305 − 0300 − 0300 = 0302
0331 − 0330 − 0330 = 0300
0328 − 0325 − 0322 = 0325

0300 − 0330
0302 − 0325
0602 0655
0602
53 = 8.8

Sealability

10" 300 Psi

136 139 135
135 140 135
.1 .1 .0

.1

VPD-94-0004614

VPD-94-0004614

LABORATORY DATA SHEET

SUBJECT Relaxation — VictoPac 65 + 60 — DATE

	#2		#4	
RT	16 509 - 468	8.2		
	9 512 - 469		18 - 488 - 438	9.8
			+ 18 487 - 441	
212	14 - 490 - 421			
	4 490 - 420	16.2	3 - 515 - 433	16.0
			29 - 512 - 430	
300	5 502 - 400			
	22 500 - 390	21.2	13 510 - 399	21.8
			23 512 - 390	
HCO	12 - 482 - 322	33.6	21 498 - 350	
203	17 - 482 - 318		19 - 498 - 330	31.3
19				

VPD-94-0004615

MADE IN USA VG 2233

VPD-94-0004615

Log # for J. Larsen

LABORATORY DATA SHEET

SUBJECT VICTOPAC 65 With P-5 Center DATE 12-1-76

Re. Russelin Asbestos

					#1	ENG. SPEC # 209
THICKNESS		0620-0587-0607			0305"	026/036
DENSITY #/ft.³	15.14 / 030	0621-0588-0608			121.7	120 min.
% COMPRESSIBILITY @ 1000 psi		0619-0584-0606			5.4	2 - 7%
% RECOVERY after 1000 psi.			0612-0543-0590		60.4	40% min.
% COMPRESSIBILITY @ 5000 psi.			0613-0540-0588		11.9	5 - 15%
% RECOVERY after 5000 psi.	1980		0609-0537-0587		66.2	40% min.
TENSILE STRENGTH	0306-31.8 0305-28.9 0303-29.8			0310-69.5 0310-65.8 0310-62.0	Ave-2027	2400 psi, min.
% Binder 1509 #38	ASTM OIL #3, 5 hr. @ 300°F			0310-59.9	13.3	
% COMPRESSIBILITY @ 5000 psi	0695-0562			0305-0349 0307-0351	18.5	30% max.
1346	0305-31.8 0302-28.4 0303-29.8	0695-0572 0692-0562		0305-0348 0303-0349 0303-0349	32.6	40% max.
% TENSILE LOSS				0303-0349		
% THICKNESS INCREASE	24.0 24.4 22.8			182.6 2096	14.7	15 - 30%
	ASTM FUEL "B", 5 hr. @ 70-85°F					
% WEIGHT INCREASE	0302-0342 0303-0342 0307-0343			0308-0342 0307-0342 0308-0342	11.0	30% max.
% THICKNESS INCREASE	345-386 345-402			1833 2053	11.9	10 - 25%
	SEALABILITY, ASTM F 37					
20" Hg - ext. load 300psi.	107 100	206 201			0.6	2 ml/hr. max.
14-490-460 15-488-454	% RELAXATION, ASTM F 38, Method B, 22 hr., 3000 psi.					
@ R.T.°					6.5	15% max.
@ 212° F		17 512-450 04 514 447			12.6	20% max.
@ 300° F 5-510-395 12-509 398					22.2	26% max.
@ 400° F 19-510-350 14-515 354					✓ 31.3	30% max.

TESTED BY B. H.

MADE IN USA VG 2233

VPD-94-0004616

VPD-94-0004616

LABORATORY DATA SHEET

SUBJECT VICTOPAC 61 - P-5 Center. DATE Dec. 1, 1976

	Re: Russian Asbestos:				#3	E.S.# 196
GAUGE		0839-0790-0822			✓ 0275"	030/035
DENSITY #/ft³	13.04 / 027"	0833-0783-0815			118.8	118 min.
%COMPRESSIB.@1000 psi.		0835-0784-0815			6.0	5 - 10%
% RECOVERY			0833-0721-0790		63.3	40% min.
%COMPRESSIB.@ 5000 psi.			0830-0722-0790		13.3	7 - 17%
% RECOVERY			0831-0720-0789		62.2	40% min.
TENSILE STRENGHT	0278-30.3 0275-25.4				✓ 1925	2000 psi.min.
% Combustibles	0275-24.0				14.1	
1302 972	IMMERSION in ASTM Oil # 3,5 hrs @ 300°F					
%COMPRESSIB.@ 5000 psi.		0657-0420 0665-0400	0273-0337 0276-0338		38.1 ✓	30% max.
	1274	0665-0410	0272-0330			
TENSILE LOSS	0278-18.1 0280-17.0		0278-0345 0278-0342		33.8	50% max.
%THICKNESS INC.	0280-18.3		0278-0342 1655 2034		22.9	15 - 30%
	5 hrs IMMERSION in ASTM FUEL "B" @ 70-85°F					
% WEIGHT INC.			0270-0308 0272-0308		12.9	30% max.
% THICKNESS INC.	320-364 388-435		0272-0307 0280-0316		13.3	10 - 25%
			0280-0317 0282-0320 1656 1876			
SEALABILITY(ASTM F37 20" HG ext.load 300 psi.		121 090 117 088 0.4 .2			0.3	5 max ml/hr.
% RELAXATION ASTM F 38 (Method B)	@ R.T.°F	19-510-464 14-500 459			8.6	16% max.
"	" @ 212°F			12-509-432 5-510 440	14.4	25% max.
"	" @ 300°F	4-512-412 17-512 413			19.4	30% max.
"	" @ 400°F				28.0	35% max.

16-488 ~~[illegible]~~-352
15-490-~~[illegible]~~ 352

TESTED BY [signature]

VPD-94-0004617 MADE IN USA VG 2233

VPD-94-0004617