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Industrial BIO-TEST Laboratories, Inc.
1810 FRONTAGE ROAD
NORTHBROOK, ILLINOIS 60062

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W. M. SMITH

23-MONTH STATUS SUMMARY TO
MANUFACTURING CHEMISTS ASSOCIATION
CHRONIC VAPOR INHALATION TOXICITY STUDY WITH
VINYL CHLORIDE (ETHYLENE DERIVED)
IN ALBINO RATS, ALBINO MICE
AND GOLDEN HAMSTERS

SEPTEMBER 23, 1975

IBT NO. 663-03222

AP00006536

Industrial **BIO-TEST** *Laboratories, Inc.*

1810 FRONTAGE ROAD
NORTHBROOK, ILLINOIS 60062

September 23, 1975

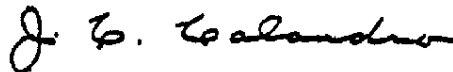
Dr. Milton Freifield
Project Manager, Vinyl Chloride Research
Manufacturing Chemists Association
1825 Connecticut Avenue, N. W.
Washington, D. C. 20009

Dear Mr. Freifield:

Re: IBT No. 663-03222 - Chronic Vapor Inhalation Toxicity
Study with Vinyl Chloride (Ethylene Derived) in Albino
Rats. Albino Mice and Golden Hamsters

We are submitting herewith our laboratory report prepared
in connection with the above study.

Very truly yours,



J. C. Calandra
President

JCC:bp

AP00006537

23-MONTH STATUS SUMMARY TO
MANUFACTURING CHEMISTS ASSOCIATION

CHRONIC VAPOR INHALATION TOXICITY STUDY WITH
VINYL CHLORIDE (ETHYLENE DERIVED)
IN ALBINO RATS, ALBINO MICE
AND GOLDEN HAMSTERS

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I. Introduction

A chronic vapor inhalation toxicity study with Vinyl Chloride (Ethylene Derived) was initiated on September 10, 1973, and terminated on September 10, 1974. Animals were then placed on observation. A summary of all data obtained through the twenty-third month is reported herein.

II. Summary

Exposure of mice to Vinyl Chloride was terminated after 9 months of testing. At this time all surviving mice were placed under observation for the remainder of the investigation with the exception of the T-III group (2,500 ppm) which was sacrificed during the eleventh month.

Rats and hamsters were exposed to Vinyl Chloride for 12 months before being placed under a non-treated observation period.

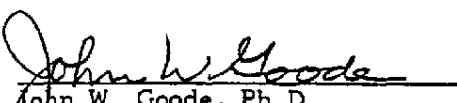
Respectfully submitted,

INDUSTRIAL BIO-TEST LABORATORIES, INC.

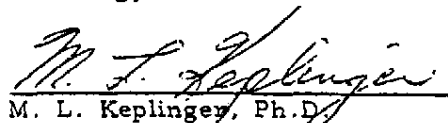
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PG

III. Body Weight Data

The mean body weight data for albino rats, albino mice and hamsters are presented in Tables I, II and III, respectively.

TEST MATERIAL: Vinyl Chloride (Ethylene Dichloride)

Chronic Vapor Inhalation Toxicity Study - Albino Rats, Albino Mice and Golden Hamsters

Summary of Mean Body Weights - Albino Rats

Sex	Group	Month Number																								
		Mean Body Weights (Grams)																								
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
Male	UC	205	363	456	498	517	537	543	550	559	697	677	689	692	708	739	769	782	779	783	803	812	823	797	814	609
	T-I	209	346	448	491	526	545	558	567	593	651	640	670	696	704	732	754	765	773	784	798	788	791	766	760	
	T-II	201	360	457	490	522	549	567	585	681	663	696	736	740	764	786	795	781	781	781	749	-	-	-	-	
	T-III	200	351	453	499	529	500	567	576	581	627	629	680	718	729	764	768	758	-	-	-	-	-	-	-	
	T-IV	181	251	282	288	291	314	324	338	348	363	363	363	384	NA	395	NA	393	421	-	-	-	-	-	-	
Female	UC	160	235	275	299	315	320	326	344	356	392	366	380	398	397	424	444	463	475	493	511	527	520	527	557	397
	T-I	168	232	274	297	310	308	323	348	367	357	363	374	384	395	425	448	458	457	472	489	493	507	480	484	
	T-II	171	242	289	302	313	316	329	342	358	368	362	386	393	414	441	479	462	440	450	484	494	-	-	-	
	T-III	165	240	287	303	312	321	329	346	359	359	356	374	378	420	450	-	-	-	-	-	-	-	-	-	
	T-IV	181	251	282	288	291	314	324	338	348	363	363	363	384	NA	395	NA	393	421	-	-	-	-	-	-	

NA = Not available.
- = No more animals remaining in group.

- = No more animals remaining in Group.
NA = Not available.

Change

TABLE II

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study - Albino Rats, Albino Mice and Golden Hamsters

Summary of Mean Body Weights - Albino Mice

Sex	Group	Mean Body Weights (grams)																							Change	
		Month Number;																								
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22		23
Male	UC	35	40	41	43	46	43	46	52	49	47	43	47	48	47	45	46	44	43	43	-	-	-	-	-	-
	T-I	33	39	39	43	44	42	47	45	47	47	48	48	49	48	48	50	48	-	-	-	-	-	-	-	
	T-II	36	40	38	42	44	42	45	43	44	46	37	44	45	-	-	-	-	-	-	-	-	-	-	-	
	T-III	36	38	40	43	44	38	45	41	41	43	31	-	-	-	-	-	-	-	-	-	-	-	-	-	
Female	UC	29	32	33	35	36	35	38	37	41	40	37	40	40	40	41	42	40	40	39	39	39	41	39	41	42
	T-I	30	34	34	37	39	38	40	41	40	40	42	43	42	43	44	39	38	-	-	-	-	-	-	-	
	T-II	28	31	34	35	37	36	38	36	40	39	30	40	37	38	40	38	38	-	-	-	-	-	-	-	
	T-III	28	31	34	35	36	37	37	34	37	39	27	-	-	-	-	-	-	-	-	-	-	-	-	-	

- = No more animals remaining in group.

TABLE III

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study - Albino Rats, Albino Mice and Golden Hamsters

Summary of Mean Body Weights - Golden Hamsters

Sex	Group	Mean Body Weights (grams)																							Change	
		Month Number,																								
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22		23
Male	UC	73	98	110	120	129	130	133	130	138	141	129	126	125	131	128	125	126	131	138	141	133	140	143	146	73
	T-I	71	90	101	114	120	121	122	128	126	118	115	110	115	121	124	122	125	112	132	136	136	137	143	150	79
	T-II	63	89	94	99	119	108	120	118	122	117	115	115	121	126	131	129	130	115	134	134	133	-	-	-	-
	T-III	60	87	91	93	91	88	112	110	115	115	115	114	110	123	120	124	129	110	127	116	-	-	-	-	-
Female	UC	77	104	108	118	120	121	124	125	128	133	119	116	117	115	122	119	115	120	118	122	121	-	-	-	-
	T-I	78	95	102	112	118	118	122	130	136	125	118	110	110	115	117	121	122	115	124	134	126	-	-	-	-
	T-II	74	94	99	108	107	106	114	112	116	118	112	112	109	114	116	117	122	116	122	128	127	-	-	-	-
	T-III	69	92	100	106	106	104	110	118	105	107	103	99	101	105	109	112	96	-	-	-	-	-	-	-	-

- = No more animals remaining in group.

IV. Mortality Data

The cumulative monthly mortality data are presented in Tables IV through VI.

The following is a summary of remaining animal groups:

<u>Species</u>	<u>Sex</u>	<u>Groups Remaining</u>
Rats	Male	UC, T-I
	Female	UC, T-I
Mice	Female	UC
Hamsters	Male	UC, T-I

From mortality data of the past 5 months of observation, the following estimations of death were obtained:

<u>Species</u>	<u>Group and Sex</u>	<u>Estimated Time of Death Months:</u>
Rats	UC-M	5
	UC-F	5
	T-I-M	4
	T-I-F	1
Mice	UC-F	1
Hamsters	UC-M	5
	T-I-M	3

TABLE IV

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study - Albino Rats,
Albino Mice and Golden Hamsters

Summary of Mortality Data - Albino Rats

Month Number	Cumulative Number of Mortalities at End of Month								
	UC		T-I		T-II		T-III		T-IV
	M	F	M	F	M	F	M	F	F
1	0	0	0	0	0	0	0	0	0
2	0	0	2	0	1	0	0	0	0
3	0	1	2	0	1	0	0	4	0
4	0	2	4	1	3	0	1	4	0
5	2	3	5	1	6	1	3	4	0
6	3	4	6	1	6	1	5	4	0
7	4	4	8	2	6	2	6	5	0
8	4	5	9	3	10	5	10	8	1
9	4	6	10	4	11	5	16	15	4
10	5	7	11	7	12	9	24	28	7
11	7	8	13	9	14	19	34	52	17
12*	13	14	19	16	21	37	58	66	40
13	16	17	23	24	26	50	73	83	46
14	19	21	26	30	33	63	85	86	76
15	21	23	28	37	40	75	94	89	86
16	23	25	31	45	46	87	100(4)	100	100(7)
17	28	27	35	53	55	90	100	100	100
18	33	28	38	59	64	94	100	100	100
19	38	31	43	66	71	94	100	100	100
20	46	34	47	73	77	94	100	100	100
21	52	42	52	80	100(18)	100(4)	100	100	100
22	57	48	63	89	100	100	100	100	100
23	64	54	72	92	100	100	100	100	100

* Includes 5 males and 5 females from each group excluding T-IV sacrificed for cytogenic study.

() Indicates moribund or sick animals sacrificed.

TABLE V

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study - Albino Rats,
Albino Mice and Golden Hamsters

Summary of Mortality Data - Albino Mice

Month Number	Cumulative Number of Mortalities at End of Month							
	UC M	F	T-I M	F	T-II M	F	T-III M	F
1	0	0	0	0	0	0	0	0
2	0	0	0	3	0	0	0	0
3	2	0	6	4	3	0	1	0
4	5	1	19	5	4	1	4	7
5	8	2	26	6	4	2	8	7
6	12	2	30	6	8	3	10	9
7	18	5	31	11	9	12	13	23
8	18	5	32	14	16	30	30	46
9	23	8	38	24	37	58	56	75
10	28	10	42	31	78	82	76	98
11	30	15	54	46	96	94	100	100
12	34	16	57	66	98	95	100	100
13	44	23	70	80	99	97	100	100
14	54	28	79	91	100	100	100	100
15	67	39	88	97	100	100	100	100
16	82	46	100	100	100	100	100	100
17	82	54	100	100	100	100	100	100
18	82	58	100	100	100	100	100	100
19	92	70	100	100	100	100	100	100
20	100	77	100	100	100	100	100	100
21	100	81	100	100	100	100	100	100
22	100	89	100	100	100	100	100	100
23	100	92	100	100	100	100	100	100

TABLE VI

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study - Albino Rats,
Albino Mice and Golden Hamsters

Summary of Mortality Data - Golden Hamsters

Month Number	Cumulative Number of Mortalities at End of Month							
	UC M	T-I		T-II		T-III		
		F	M	F	M	F	M	F
1	5	4	4	4	7	5	2	5
2	8	11	10	12	9	16	10	11
3	8	13	12	14	12	18	14	13
4	9	15	16	16	15	19	15	13
5	9	18	16	16	16	20	15	15
6	13	18	16	16	20	21	16	16
7	13	28	24	19	22	33	18	26
8	14	28	24	19	23	35	19	28
9	14	29	24	20	25	36	20	28
10	14	30	26	20	26	37	23	29
11	15	31	28	21	26	38	28	36
12	18	36	34	33	37	46	40	45
13	23	40	43	49	46	49	49	58
14	28	46	49	58	54	53	61	69
15	39	61	53	72	66	55	71	84
16	50	78	58	83	74	59	84	100(3)
17	57	81	61	85	76	66	86	100
18	62	85	62	86	77	75	88	100
19	65	90	68	89	79	84	92	100
20	71	96	73	95	86	89	100(5)	100
21	71	100(2)	80	100(3)	100(13)	100(7)	100	100
22	73	100	82	100	100	100	100	100
23	78	100	85	100	100	100	100	100

() Indicates moribund or sick animals sacrificed.

V. Hematologic Data

Twenty-three month hematologic data are presented in Tables VII through X.

TABLE VII

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study - Albino Rats, Albino Mice and Golden Hamsters

Hematologic Data - Male Rats

Group	Animal Number	Total Leukocyte Count (thousands/mm ³)	Erythrocyte Count (millions/mm ³)	Hemoglobin Concentration (g/100 ml)	Hematocrit Value (%)
		Test Month: 23	Test Month: 23	Test Month: 23	Test Month: 23
Untreated	1	9.0	8.03	14.2	48
Control	4	11.3	8.89	16.0	53
	5	8.7	8.97	15.6	51
	7	9.8	7.30	16.1	50
	15	13.6	5.30	11.5	40
	17	16.0	6.91	14.6	48
	18	11.5	8.52	15.7	54
	19	14.8	6.40	14.8	46
	22	8.0	7.79	15.2	50
	27	10.8	6.57	15.4	50
	28	15.6	6.14	14.8	45
	34	9.7	8.17	15.2	48
	37	11.6	7.88	15.6	52
	40	15.0	8.19	16.2	52
	41	6.6	7.84	16.0	51
	42	8.8	8.55	15.9	50
	47	7.9	8.44	17.0	55
	49	9.2	6.65	14.0	44
	52	11.6	7.84	16.0	50
	53	10.4	8.70	16.2	52
	Mean	11.0	7.65	15.3	49

TABLE VII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study - Albino Rats, Albino Mice and Golden Hamsters

Hematologic Data - Male Rats

Group	Animal Number	Total Leukocyte Count (thousands/mm ³)	Erythrocyte Count (millions/mm ³)	Hemoglobin Concentration (g/100 ml)	Hematocrit Value (%)
		Test Month: 23	Test Month: 23	Test Month: 23	Test Month: 23
T-I	201	9.8	6.54	12.4	40
	207	14.6	6.54	14.0	44
	209	12.4	3.82	8.6	30
	212	12.4	7.26	14.4	46
	214	8.7	6.91	14.3	44
	222	9.2	6.38	13.7	42
	223	10.8	6.44	13.8	46
	225	14.8	6.44	10.4	38
	226	11.8	7.83	15.2	49
	227	5.4	6.57	13.7	42
	228	7.6	7.83	15.2	47
	232	9.2	7.80	14.3	44
	233	10.4	8.19	15.8	50
	234	7.3	8.45	15.6	49
	238	10.5	7.75	15.4	48
	241	12.2	9.37	16.4	52
	246	13.7	6.77	13.6	41
	250	18.6	7.47	14.0	45
	255	6.4	6.95	13.8	42
	268	8.7	7.18	14.6	44
	Mean	10.7	7.12	14.0	44

TABLE VIII

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study - Albino Rats, Albino Mice and Golden Hamsters

Hematologic Data - Female Rats

Group	Animal Number	Total Leukocyte Count (thousands/mm ³)	Erythrocyte Count (millions/mm ³)	Hemoglobin Concentration (g/100 ml)	Hematocrit Value (%)
		Test Month: 23	Test Month: 23	Test Month: 23	Test Month: 23
Untreated	102	13.0	5.02	12.0	40
Control	105	9.1	6.78	14.9	48
	107	7.8	6.38	13.2	42
	108	15.3	7.15	14.6	46
	111	8.3	5.29	10.4	34
	112	15.6	4.49	9.1	30
	113	10.3	5.49	12.2	38
	117	3.6	7.26	14.6	46
	118	6.1	5.80	12.0	38
	119	11.1	5.43	12.2	38
	121	9.0	6.10	13.6	42
	123	14.4	4.90	10.0	35
	124	10.8	6.25	13.2	40
	125	6.1	7.27	14.8	46
	127	5.8	7.10	14.0	43
	130	20.0	2.69	5.7	22
	131	5.0	7.18	14.6	46
	132	5.9	7.60	14.4	45
	133	8.1	6.54	13.5	42
	134	7.0	7.30	14.4	45
	Mean	9.6	6.10	12.7	40

TABLE VIII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study - Albino Rats, Albino Mice and Golden Hamsters

Hematologic Data - Female Rats

Group	Animal Number	Total Leukocyte Count (thousands/mm ³) Test Month:	Erythrocyte Count (millions/mm ³) Test Month:	Hemoglobin Concentration (g/100 ml) Test Month:	Hematocrit Value (%) Test Month:
		23	23	23	23
T-I	315	9.6	7.11	13.2	43
	322	8.4	6.95	13.6	43
	326	24.6	2.01	4.4	17
	337	9.0	8.24	13.8	49
	352	28.4	6.28	10.8	36
	354	14.9	4.42	8.8	30
	363	5.9	8.60	13.5	46
	Mean	14.4	6.23	11.2	38

TABLE IX

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study - Albino Rats, Albino Mice and Golden Hamsters

Hematologic Data - Male Rats

Differential Leukocyte Count (number of cells per hundred)									
Group	Animal Number	Ring*	Neutrophils		Segmented	Lymphocytes		Monocytes	
			Month Number:	Band		Month Number:	Month Number:	Month Number:	Month Number:
			23			23	23	23	23
Untreated	17	5	2		41	52	0	0	0
Control	28	10	0		52	37	0	1	0
	40	11	0		40	48	1	0	0
T-1	250	10	0		11	79	0	0	0

* Several of the ring-form neutrophils were twisted like a figure 8.

TABLE X

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study - Albino Rats, Albino Mice and Golden Hamsters

Hematologic Data - Female Rats

Differential Leukocyte Count (number of cells per hundred)								
Group	Animal Number	Ring*	Neutrophils	Segmented	Lymphocytes	Monocytes	Eosinophils	Basophils
			Band Month Number: 23		Month Number: 23	Month Number: 23	Month Number: 23	Month Number: 23
Untreated	108	7	1	34	52	5	1	0
Control	112	14	0	52	31	1	2	0
	117	7	0	30	63	0	0	0
	130	11	1	34	54	0	0	0
T-I	326	11	0	35	53	1	0	0
	352	13	0	31	54	1	1	0
	354	9	0	32	57	2	0	0

* Several of the ring-form neutrophils were twisted like a figure 8.

VI. Gross Pathology

Tables XI, XII and XIII present suspected treatment-related tumors based on lesions found during gross necropsy. These lesions will be evaluated by histopathological examination to determine their true value.

Tumor Key

C = cannibalized
ESC = escaped
P = postmortem animal
PMA = valid evaluation precluded by postmortem autolysis
S = sacrificed animal
SE = sacrificed in extremis
A = animal still alive

TABLE XI

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Rats

Group	Animal Number	Days on Test	Mortality					Misc.
			Data	Liver	Spleen	Lung	Skin	
Untreated	1		A					
Control	2	557	P					
	3	530	P				X	
	4		A					
	5		A					
	6	372	P					
	7		A					
	8	411	P				X	
	9	504	PMA					
	10	556	P					
	11	564	PMA					
	12	532	PMA					
	13	590	PMA				X	
	14	331	P					
	15		A					
	16	656	P					
	17		A					
	18		A					
	19		A					
	20	681	P				X	
	21	712	P				X	
	22		A					
	23	609	P					
	24	607	P					
	25	424	P					
	26	645	SE					Kidney
	27		A					
	28		A					
	29	712	P					
	30	611	PMA					
	31	402	P					
	32	138	P					
	33	365	PMA					
	34		A					
	35	146	PMA					
	36	612	PMA					

TABLE XI continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Rats

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
Untreated	37		A					
Control	38	660	P					
continued	39	360	S	X				
	40		A					
	41		A					
	42		A					
	43	667	SE				X	
	44	702	PMA					
	45	524	PMA				X	
	46	619	P					Kidney
	47		A					
	48	703	P				X	
	49		A					
	50	673	P					
	51	204	P				X	
	52		A					
	53		A					
	54	360	S					
	55	360	S					
	56	692	P	X				
	57		A					
	58	641	P					
	59	347	PMA					
	60	463	PMA					
	61	272	P					
	62		A					
	63	456	P				X	
	64		A					
	65	572	P					
	66	581	P					
	67	511	P					
	68		A					
	69	360	S	X				
	70	626	P					
	71	578	PMA					
	72		A					

TABLE XI continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Rats

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
Untreated	73		A					
Control	74	599	P					
continued	75	541	P					
	76	305	PMA					
	77	675	P		X			
	78		A					
	79		A					
	80		A					
	81		A					
	82	685	P					
	83	603	P	X	X			
	84	360	S					
	85	699	P				X	
	86	595	P					
	87	587	P					
	88	713	PMA					
	89	384	P					
	90	302	P				X	
	91	706	PMA					
	92	507	P					
	93	415	P					
	94	409	P					
	95	384	P					
	96	591	P	X			X	
	97	168	P					
	98	474	P					
	99	496	P				X	
	100	710	P					

TABLE XI continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Rats

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
T-I	201		A					
	202	462	P					
	203	146	PMA					
	204	668	P					
	205	361	S	X				
	206	642	P				X	
	207		A					
	208	701	PMA					
	209		A					
	210	536	P					
	211	189	P					
	212		A					
	213	703	P	X				
	214		A					
	215	145	P					
	216	568	P	X				
	217	599	P	X		X		
	218	718	P					
	219	529	P					
	220	101	PMA					
	221	541	P					
	222		A					
	223	721	P	X				
	224	668	P					
	225		A					
	226		A					
	227		A					
	228		A					
	229	675	P					
	230	74	PMA					
	231	719	P	X				
	232		A					
	233		A					
	234		A					
	235	324	PMA					
	236	645	P	X				

TABLE XI continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Rats

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
T-I	237	136	PMA					
continued	238		A					
	239	646	P					
	240	261	P					
	241	722	P					
	242	693	P					Thymus
	243	669	PMA					
	244	611	P	X	X			Kidney
	245	595	P					
	246		A					
	247	695	P	X				
	248	703	P					
	249	526	P				X	
	250		A					
	251		A					
	252	508	P	X				
	253	113	P					
	254	693	P				X	
	255		A					
	256	361	S	X				
	257	634	PMA					
	258	34	PMA					
	259	581	P					Kidney
	260	617	P	X				
	261	624	P				X	
	262	275	PMA					
	263	274	P					
	264	361	S					
	265	693	P					
	266	318	P	X				
	267	662	P	X				
	268		A					
	269	642	P	X				Kidney
	270	99	C					
	271	534	P				X	
	272	640	P					Kidney

TABLE XI continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Rats

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
T-I	273	690	P				X	
continued	274	661	SE				X	
	275	504	P					
	276	158	PMA					
	277	388	P					
	278	569	P					
	279	361	S					
	280	383	P	X				
	281	585	P					
	282		A					
	283	204	P					
	284	670	P	X			X	
	285		A					
	286	665	SE	X				
	287	547	PMA					
	288	531	P					
	289	43	ESC					
	290	438	P					
	291	412	ESC					
	292		A					
	293	541	P					
	294	573	P					
	295	224	P					
	296	89	PMA					
	297	94	PMA					
	298	249	PMA					
	299	361	S	X				
	300	547	P					

TABLE XI continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Rats

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
T-II	401	495	P	X				
	402	505	P	X		X		
	403	626	P				X	
	404	361	S	X				
	405	474	P	X				Pancreas
	406	534	P	X	X			
	407	527	SE	X				
	408	555	P				X	
	409	535	P					
	410	340	PMA					
	411	485	PMA				X	
	412	631	S	X				
	413	631	S	X				
	414	506	P	X				
	415	64	P					
	416	597	P	X				Mesentery
	417	506	P	X		X		
	418	631	S	X				
	419	574	P	X				
	420	415	P	X				
	421	604	P	X				
	422	449	PMA					
	423	108	PMA					
	424	341	P	X				
	425	589	P					
	426	626	S	X			X	
	427	529	PMA					
	428	626	S	X				
	429	611	P	X				
	430	626	S					
	431	297	P	X				
	432	317	PMA					
	433	361	S	X				
	434	617	P	X		X		
	435	626	S	X				
	436	626	S	X				Thymus

TABLE XI continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Rats

Group	Animal Number	Days on Test	Mortality					
			Data	Liver	Spleen	Lung	Skin	Misc.
T-II	437	478	P					
continued	438	381	P	X				
	439	474	PMA					
	440	626	S	X				
	441	134	PMA					
	442	616	PMA					
	443	451	P					
	444	535	PMA					
	445	626	S					
	446	576	P				X	
	447	449	P	X		X		
	448	482	P	X				
	449	501	P	X				
	450	507	P	X				
	451	532	PMA					
	452	626	S	X				
	453	626	S	X				
	454	502	PMA					
	455	452	P	X		X		
	456	626	S	X				
	457	466	P					
	458	526	PMA					
	459	361	S	X				
	460	577	PMA					
	461	333	P	X	X			
	462	575	PMA					
	463	485	PMA					
	464	626	S	X		X		
	465	465	P	X				
	466	239	PMA					
	467	547	P					
	468	395	P	X				
	469	361	S					
	470	224	P					
	471	626	S	X				
	472	244	P					

TABLE XI continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Rats

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
T-II	473	502	P	X				
continued	474	544	P	X				
	475	626	S	X				
	476	229	P					Prostate Seminal vesicle
	477	374	P	X				
	478	196	PMA					
	479	590	PMA					
	480	231	PMA					
	481	525	P	X				
	482	569	P	X				
	483	596	P	X		X		
	484	626	S					
	485	468	P			X		
	486	513	P	X		X		
	487	223	PMA					
	488	223	PMA					
	489	361	S	X				
	490	359	PMA					
	491	626	S					
	492	432	P					
	493	465	P	X				
	494	612	P	X		X		
	495	536	PMA					
	496	480	P	X				
	497	446	P	X				
	498	429	P	X				Lymph nodes
	499	129	P					
	500	480	P	X				

TABLE XI continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Rats

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
T-III	601	355	SE					
	602	247	PMA					
	603	272	P					
	604	402	P	X		X		
	605	366	P	X				
	606	242	P					
	607	344	P	X				
	608	384	P	X		X		
	609	361	S					
	610	439	P	X				
	611	390	P	X	X			Mesentery
	612	236	P					
	613	394	P			X		
	614	400	P	X				
	615	411	P	X				
	616	496	P					
	617	250	P	X				
	618	498	S	X				
	619	426	P	X				
	620	470	P	X				
	621	371	P	X		X		
	622	244	P	X				
	623	292	P	X				
	624	362	SE	X			X	
	625	341	SE	X		X	X	
	626	344	P	X				
	627	353	P	X				
	628	448	P	X				
	629	389	P	X		X		
	630	424	P				X	
	631	452	PMA					
	632	341	SE	X			X	
	633	341	P				X	
	634	455	P	X				
	635	177	P					
	636	392	P	X				

TABLE XI continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Rats

Group	Animal Number	Days on Test	Mortality					
			Data	Liver	Spleen	Lung	Skin	Misc.
T-III	637	405	P					
continued	638	412	P	X				
	639	361	S	X				
	640	459	P	X		X		
	641	359	SE					Kidney
	642	208	PMA					
	643	293	P	X				
	644	498	S	X				
	645	340	P	X				
	646	373	P					
	647	258	P					
	648	314	P					
	649	402	SE					
	650	318	PMA					
	651	372	SE	X				
	652	386	P	X				
	653	281	P				X	
	654	452	P					
	655	343	SE				X	
	656	428	P	X				
	657	148	P					
	658	427	PMA					
	659	453	P	X				
	660	92	P					
	661	299	P	X				
	662	339	P	X				
	663	361	S	X				
	664	373	SE					Brain
	665	274	P					
	666	382	P	X				
	667	383	SE	X				Brain
	668	361	S	X				
	669	377	P	X				
	670	366	P	X				
	671	383	SE	X		X		
	672	310	SE					Brain

TABLE XI continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Rats

Group	Animal Number	Days on Test	Mortality					
			Data	Liver	Spleen	Lung	Skin	Misc.
T-III continued	673	321	P	X	X			
	674	335	PMA					
	675	352	SE			X	X	
	676	342	P	X				
	677	297	SE				X	
	678	304	P					
	679	428	P	X				
	680	273	PMA					
	681	314	P	X				
	682	296	SE				X	
	683	338	P					
	684	359	P	X		X		
	685	374	P	X				
	686	360	P	X				
	687	498	S	X				
	688	443	P	X				
	689	308	P	X				
	690	393	PMA					
	691	413	P	X				
	692	408	P					
	693	157	PMA					
	694	361	S	X				
	695	455	P	X				
	696	311	P					
	697	364	P	X				
	698	383	P	X				
	699	332	P	X				
	700	143	P					

TABLE XI continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Rats

Group	Animal Number	Days on Test	Mortality					
			Data	Liver	Spleen	Lung	Skin	Misc.
Untreated	101	661	SE				X	
Control	102		A					
	103	713	P				X	
	104	649	P				X	
	105		A					
	106	360	S	X				
	107		A					
	108		A					
	109	513	PMA					
	110	704	P				X	
	111		A					
	112		A					
	113		A					
	114	573	P					
	115	673	P				X	
	116	386	SE					
	117		A					
	118		A					
	119		A					
	120	619	P				X	
	121		A					
	122	575	P				X	
	123		A					
	124		A					
	125		A					
	126	563	PMA					
	127		A					
	128	313	P					
	129	557	P				X	
	130		A					
	131		A					
	132		A					
	133		A					
	134		A					
	135	492	PMA				X	
	136		A					

TABLE XI continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Rats

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
Untreated	137		A					
Control	138	504	P				X	
continued	139	460	P	X				
	140		A					
	141	612	P					
	142		A					
	143		A					
	144	619	P				X	
	145	718	P					
	146		A					
	147	452	P					
	148		A					
	149	360	S	X				
	150		A					
	151	113	P					
	152	715	P				X	
	153		A					
	154	71	P					
	155	704	P				X	
	156	656	P				X	
	157	596	P				X	
	158		A					
	159	652	SE					
	160	360	S					
	161	357	P					
	162	691	PMA				X	
	163	616	P				X	
	164	499	P					
	165	544	P				X	
	166		A					
	167	129	PMA					
	168	607	PMA					
	169	296	P					
	170	698	P					
	171	272	PMA					
	172		A					

TABLE XI continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Rats

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
Untreated	173	169	P					
Control	174		A					
continued	175	222	P					
	176		A					
	177	611	P					
	178	361	S	X				
	179	640	P				X	
	180		A					
	181	660	P	X				
	182		A					
	183		A					
	184	665	SE					Adrenal gland
	185	616	P				X	
	186	669	P					Adrenal gland
	187		A					
	188	614	P				X	
	189	631	P				X	
	190	199	PMA					
	191		A					
	192	241	PMA					
	193	461	PMA					
	194	596	SE					
	195		A					
	196		A					
	197	495	SE				X	
	198	699	P				X	
	199	531	P				X	
	200	361	S	X				Adrenal gland

TABLE XI continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Rats

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
T-I	301	460	P	X				
	302	652	SE					Adrenal gland
	303	361	S	X				
	304	604	P				X	
	305	569	P	X				
	306	174	PMA					
	307	479	PMA					
	308	238	P				X	
	309	651	P	X		X	X	
	310	512	P				X	
	311	555	P				X	
	312	595	P	X			X	
	313	404	P				X	
	314	516	P				X	
	315		A					
	316	283	P					
	317	630	P				X	
	318	247	P					
	319	41	PMA					
	320	388	P	X				
	321	460	P	X			X	
	322		A					
	323	641	P	X			X	
	324	691	PMA				X	
	325	522	P				X	
	326	718	SE				X	
	327	616	P				X	
	328	451	P	X			X	
	329	614	P	X			X	
	330	413	P				X	
	331	661	SE				X	
	332	617	P				X	
	333	621	P	X			X	
	334	577	P	X			X	
	335	656	SE		X			Adrenal gland

TABLE XI continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Rats

Group	Animal Number	Days on Test	Mortality					Misc.
			Data	Liver	Spleen	Lung	Skin	
T-I	336	524	P				X	
continued	337		A					
	338	477	P	X			X	
	339	607	P	X			X	
	340	632	P				X	
	341	180	PMA					
	342	214	P					
	343	588	P				X	
	344	760	PMA				X	
	345	573	P	X				
	346	180	PMA					
	347	116	PMA					
	348	427	P					
	349	361	S	X				
	350	466	P					
	351	597	P				X	
	352		A					
	353	300	P				X	
	354		A					
	355	540	P				X	
	356	449	PMA					
	357	449	P	X		X	X	
	358	531	P				X	
	359	49	PMA					
	360	51	PMA					
	361	547	PMA					
	362	493	P				X	
	363		A					
	364	333	PMA					
	365	454	PMA					
	366	476	P				X	
	367	523	P					
	368	428	P				X	
	369	361	S	X				Kidney
	370	521	PMA					
	371	277	P	X			X	
	372	437	P	X				

TABLE XI continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Rats

Group	Animal Number	Days on Test	Mortality		Liver	Spleen	Lung	Skin	Misc.
			Data						
T-I continued	373	84	P		X				Kidney Uterus
	374	536	P		X			X	
	375	542	P					X	
	376	642	SE		X			X	
	377	381	P					X	
	378	198	PMA						
	379	494	P						
	380	419	PMA						
	381	361	S		X				
	382	656	SE					X	Adrenal gland
	383	513	P		X				
	384	519	P					X	
	385	337	P				X	X	
	386	356	PMA						
	387	654	P					X	
	388	400	PMA						
	389	283	P						
	390	584	PMA						
	391	127	PMA						
	392	556	PMA						
	393	387	PMA						
	394	576	P					X	
	395	593	P		X			X	
	396	346	PMA						
	397	361	S		X				
	398	703	P					X	
	399	532	P		X		X	X	
	400	591	P					X	

TABLE XI continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Rats

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
T-II	501	473	PMA				X	
	502	341	P	X				
	503	471	P				X	
	504	483	P	X			X	
	505	384	P	X				
	506	360	P	X				
	507	438	P				X	
	508	433	PMA					
	509	327	PMA					
	510	395	PMA					
	511	626	SE	X		X	X	
	512	348	P	X				
	513	295	PMA					
	514	624	P	X			X	
	515	377	P	X				
	516	377	P					
	517	515	P				X	
	518	208	P					
	519	356	P	X				
	520	360	SE	X				
	521	143	P					
	522	626	S			X		Kidney
	523	480	P	X				
	524	361	S	X				
	525	466	PMA					
	526	392	P	X				
	527	364	P	X			X	
	528	471	PMA				X	
	529	515	PMA					
	530	420	P	X				
	531	488	P				X	Mesentery
	532	414	P	X				
	533	389	P	X				
	534	437	P	X		X		
	535	238	PMA					
	536	509	P	X		X	X	
	537	508	P				X	

TABLE XI continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Rats

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
T-II	538	377	PMA					
continued	539	316	PMA					
	540	359	PMA					
	541	341	P	X				
	542	281	P	X				
	543	306	P	X				
	544	356	P	X		X		
	545	487	P	X		X		
	546	428	P				X	
	547	373	P	X				
	548	396	P	X				Pancreas
	549	303	P	X				Thymus
	550	361	S	X				
	551	336	PMA					
	552	335	P	X				
	553	427	P	X				
	554	500	P	X				
	555	461	PMA					
	556	399	P	X				
	557	626	S			X		
	558	496	PMA					
	559	393	P	X		X	X	
	560	321	P	X				
	561	314	P	X			X	
	562	222	P	X				
	563	314	P			X		Kidney
	564	452	P	X		X		
	565	402	P	X				
	566	626	S				X	
	567	366	P	X				
	568	429	P	X			X	
	569	361	S	X				Adrenal gland
	570	443	P				X	
	571	417	P	X		X		
	572	363	P	X				
	573	416	P	X				

TABLE XI continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
 Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Rats

Group	Animal Number	Days on Test	Mortality					
			Data	Liver	Spleen	Lung	Skin	Misc.
T-II continued	574	276	P			X		
	575	325	P	X		X		
	576	379	P	X				
	577	345	PMA					
	578	468	P				X	
	579	234	P					
	580	262	PMA				X	
	581	395	P	X		X		
	582	411	P	X		X		Lymph nodes
	583	309	P	X				
	584	505	P	X		X		
	585	306	P	X		X		
	586	429	P	X		X		
	587	420	P	X				
	588	419	P	X				
	589	402	P	X				
	590	311	PMA					
	591	311	P	X		X		
	592	388	PMA					
	593	387	PMA					
	594	361	S					
	595	357	PMA					
	596	429	P	X			X	
	597	417	PMA					
	598	454	P	X				
	599	361	S	X				
	600	335	PMA					

TABLE XI continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Rats

Group	Animal Number	Days on Test	Mortality					
			Data	Liver	Spleen	Lung	Skin	Misc.
T-III	701	366	P	X				
	702	262	P					
	703	185	C					
	704	373	PMA					
	705	443	P				X	
	706	373	P	X				
	707	346	P	X				
	708	375	PMA					
	709	306	SE	X				
	710	240	P				X	
	711	333	P	X				
	712	303	PMA					
	713	261	P	X				
	714	405	P	X				
	715	312	P	X		X		
	716	353	P	X				
	717	361	S	X				
	718	383	P	X				
	719	405	P	X				
	720	224	P	X				
	721	211	P					
	722	317	SE	X				
	723	374	P	X				
	724	296	P	X				Thymus
	725	438	P	X			X	Salivary gland
	726	321	P					
	727	303	P	X				
	728	361	S					
	729	381	P				X	
	730	443	P	X				
	731	319	PMA					
	732	361	S	X				
	733	334	SE					
	734	82	PMA					
	735	361	S	X				
	736	316	PMA					

TABLE XI continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Rats

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
T-III	737	378	PMA					
continued	738	295	P	X				
	739	302	P	X				
	740	362	SE	X		X		
	741	311	P					
	742	361	S	X				
	743	325	PMA					
	744	367	P	X				
	745	351	PMA					
	746	368	SE	X				
	747	235	P	X				
	748	347	P	X				
	749	379	P	X				
	750	336	P	X		X		
	751	82	PMA					
	752	82	PMA					
	753	377	P	X				
	754	371	P	X				
	755	277	P	X				
	756	348	P	X			X	
	757	374	P	X				Pancreas
	758	383	PMA					
	759	82	PMA					
	760	320	P	X			X	
	761	354	SE	X			X	Thymus
	762	256	P	X			X	
	763	365	P	X				
	764	290	P	X				
	765	322	P				X	
	766	311	SE				X	
	767	326	SE	X				Kidney
	768	311	P	X				
	769	113	PMA					
	770	268	P	X				
	771	286	P	X				
	772	330	P	X				

TABLE XI continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Rats

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
T-III continued	773	314	P	X				
	774	343	P	X				
	775	339	P	X				
	776	284	P	X				
	777	365	P	X				
	778	299	C					
	779	325	PMA					
	780	353	SE	X			X	
	781	389	P	X				
	782	322	P					
	783	303	SE					Salivary gland Cervical lymph nodes
	784	372	PMA					
	785	283	P	X				
	786	113	PMA					
	787	113	PMA					
	788	113	PMA					
	789	324	P	X				Kidney
	790	113	PMA					
	791	401	P	X		X	X	
	792	339	P	X				
	793	274	P	X				
	794	271	P	X				
	795	113	PMA					
	796	78	ESC					
	797	78	ESC					
	798	348	P	X			X	
	799	78	ESC					
	800	78	ESC					

TABLE XI continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Rats

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
T-IV	2401	379	P				X	
	2402	359	PMA					
	2403	311	PMA					
	2404	345	P	X			X	
	2405	411	P	X				
	2406	405	P	X				
	2407	310	PMA					
	2408	398	P	X				
	2409	434	P	X				
	2410	268	P	X			X	
	2411	473	P	X				
	2412	349	P				X	Mesentary
	2413	434	SE	X				
	2414	496	P	X				
	2415	261	PMA					
	2416	498	S					
	2417	346	P	X				
	2418	351	P	X				
	2419	352	P	X				
	2420	398	P	X				
	2421	498	S	X		X		
	2422	342	PMA				X	
	2423	379	PMA					
	2424	434	P	X				
	2425	498	S	X			X	
	2426	489	P	X			X	
	2427	457	P	X			X	
	2428	366	P	X				
	2429	382	P				X	
	2430	297	P	X				
	2431	372	PMA					
	2432	429	P	X			X	
	2433	311	P	X				
	2434	264	P	X				
	2435	342	P	X				
	2436	484	P	X		X		Pancreas

TABLE XI continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Rats

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
T-IV	2437	385	P	X				
continued	2438	306	SE					Cervical lymph nodes
	2439	365	P	X				
	2440	394	PMA					
	2441	306	P					
	2442	381	P	X			X	
	2443	473	P					
	2444	352	P	X				Lymph nodes
	2445	385	PMA					
	2446	385	P					
	2447	340	P	X				
	2448	325	P	X		X		
	2449	370	P		X			
	2450	426	PMA				X	
	2451	426	P	X				
	2452	365	PMA					
	2453	331	PMA					
	2454	423	P	X				
	2455	220	PMA					
	2456	330	PMA					
	2457	392	P	X		X		
	2458	375	P	X				
	2459	387	P	X			X	
	2460	365	PMA					
	2461	498	S	X			X	
	2462	326	SE	X		X		
	2463	375	P	X				
	2464	318	PMA					
	2465	411	P	X			X	
	2466	356	P	X			X	
	2467	365	PMA					
	2468	432	P					
	2469	424	P	X				
	2470	361	P	X			X	
	2471	383	PMA					
	2472	414	P	X				

TABLE XI continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Rats

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
T-IV	2473	447	P	X		X		
continued	2474	431	P	X			X	
	2475	351	P	X	X			Pancreas
	2476	448	P	X				
	2477	469	P	X				Mesentery
	2478	368	PMA					
	2479	407	PMA					
	2480	417	P	X				
	2481	323	PMA					
	2482	398	P					
	2483	316	P	X	X			
	2484	314	PMA					
	2485	250	SE				X	
	2486	348	P					
	2487	476	P	X				
	2488	440	P	X			X	
	2489	344	PMA					
	2490	403	P	X				
	2491	390	PMA					
	2492	379	PMA					
	2493	415	PMA					
	2494	498	S				X	
	2495	355	P	X				
	2496	368	PMA					
	2497	356	PMA					
	2498	285	SE				X	
	2499	422	P				X	
	2500	432	P	X				Ovary Kidney Mesentery

TABLE XII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Mice

Group	Animal Number	Days on Test	Mortality					Misc.
			Data	Liver	Spleen	Lung	Skin	
Untreated	801	560	PMA					
Control	802	429	PMA					
	803	569	PMA					
	804	174	PMA					
	805	428	PMA					
	806	371	PMA					
	807	301	P					
	808	429	P					
	809	502	P					
	810	329	P					
	811	452	P					
	812	204	PMA					
	813	428	PMA					
	814	197	PMA					
	815	190	P					
	816	388	P					
	817	505	PMA					
	818	148	PMA					
	819	305	P					
	820	474	PMA					
	821	568	P					
	822	187	P					
	823	94	P					
	824	568	P					
	825	134	PMA					
	826	418	PMA					
	827	122	PMA					
	828	134	PMA					
	829	321	P					
	830	340	PMA					
	831	200	PMA					
	832	570	PMA					
	833	462	P					
	834	401	P					
	835	94	P					

TABLE XII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Mice

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
Untreated	836	116	PMA					
Control	837	178	P					
continued	838	508	PMA					
	839	416	PMA					
	840	388	PMA					
	841	279	PMA					
	842	302	PMA					
	843	213	PMA					
	844	390	P					
	845	451	PMA					
	846	390	P					Kidney
	847	575	P					
	848	461	PMA					
	849	271	SE					
	850	527	PMA					
	851	497	P					
	852	441	P					
	853	161	PMA					
	854	255	PMA					
	855	255	PMA					
	856	261	P					
	857	174	PMA					
	858	564	PMA					
	859	148	P					
	860	178	P					
	861	178	PMA					
	862	435	PMA					
	863	496	P					
	864	272	PMA					
	865	376	P					
	866	409	P					
	867	564	PMA					
	868	454	P					
	869	351	SE					
	870	349	P					

TABLE XII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Mice

Group	Animal Number	Days on Test	Mortality					
			Data	Liver	Spleen	Lung	Skin	Misc.
Untreated	871	176	P					
Control	872	567	PMA					
continued	873	150	PMA					
	874	276	P					
	875	152	PMA					
	876	466	P					
	877	450	P					
	878	371	PMA					
	879	500	P					
	880	411	P					
	881	431	P					
	882	423	PMA					
	883	406	P					
	884	380	P					
	885	381	P					
	886	459	P					
	887	292	P					
	888	376	P					
	889	431	P					
	890	275	PMA					
	891	316	P					
	892	530	P					
	893	94	PMA					
	894	409	P					
	895	378	P					
	896	262	PMA					
	897	428	P					
	898	354	P					
	899	277	PMA					
	900	424	PMA					

TABLE XII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Mice

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
T-I	1001	149	P					
	1002	445	P					
	1003	392	PMA					
	1004	362	P					Prostate
	1005	492	P	X		X		
	1006	421	P			X		
	1007	130	C					
	1008	309	PMA					
	1009	498	S	X				Mesentery
	1010	332	PMA					
	1011	79	C					
	1012	79	PMA					
	1013	85	C					
	1014	85	C					
	1015	85	C					
	1016	309	P					
	1017	378	P					
	1018	136	C					
	1019	92	C					
	1020	290	P			X		
	1021	121	C					
	1022	437	P					
	1023	121	C					
	1024	498	S	X				
	1025	498	S	X				
	1026	367	PMA					
	1027	413	P			X		
	1028	137	P					
	1029	332	PMA					
	1030	498	S					
	1031	115	P					
	1032	346	P			X		Mesenteric nodes
	1033	115	P					
	1034	173	PMA					
	1035	281	P			X		

TABLE XII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Mice

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
T-I	1036	407	P					
continued	1037	150	PMA					
	1038	373	P					Mesenteric nodes
	1039	196	P					
	1040	265	P					
	1041	205	PMA					
	1042	275	PMA					
	1043	377	P					
	1044	378	P					
	1045	123	PMA					
	1046	145	PMA					
	1047	247	P					
	1048	149	P					
	1049	498	S			X		
	1050	243	PMA					
	1051	389	P					
	1052	121	P					
	1053	196	P					
	1054	118	PMA					
	1055	196	P			X		
	1056	149	P					
	1057	145	PMA					
	1058	85	C					
	1059	121	C					
	1060	346	P	X		X		
	1061	165	PMA					
	1062	271	PMA					
	1063	121	C					
	1064	104	PMA					
	1065	498	S	X		X		
	1066	121	P					
	1067	332	P			X		
	1068	286	P			X		
	1069	434	P					
	1070	121	C					

TABLE XII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Mice

Group	Animal Number	Days on Test	Mortality					Misc.
			Data	Liver	Spleen	Lung	Skin	
T-I	1071	446	P			X		
continued	1072	316	PMA					
	1073	294	PMA					
	1074	377	PMA					
	1075	386	P	X				
	1076	386	P					
	1077	401	P					
	1078	311	P					
	1079	319	P	X		X		
	1080	437	P					Mesenteric nodes
	1081	406	P					
	1082	362	P	X		X		
	1083	448	PMA					
	1084	498	S	X				
	1085	432	P					
	1086	406	PMA					
	1087	407	P					
	1088	407	P	X				
	1089	275	P	X				
	1090	410	PMA					
	1091	267	P					
	1092	332	P			X		
	1093	380	P					
	1094	293	PMA					
	1095	369	P					
	1096	432	P	X		X		Kidney
	1097	386	P	X				Kidney
	1098	353	P	X		X		
	1099	446	P					
	1100	365	P					

TABLE XII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Mice

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
T-II	1201	320	P	X		X		
	1202	277	P	X		X		Kidney
	1203	264	P	X				
	1204	225	P	X				
	1205	274	P	X		X		Mesentery
	1206	296	P	X		X		
	1207	254	P			X		
	1208	291	P	X		X		
	1209	275	P	X		X		
	1210	309	P	X				
	1211	286	P	X		X		
	1212	331	SE	X		X		
	1213	351	P	X		X		
	1214	331	SE	X		X		
	1215	322	PMA					
	1216	359	P	X		X		Mesenteric nodes
	1217	293	P	X		X		
	1218	318	SE	X		X		
	1219	272	P	X		X		
	1220	291	PMA					
	1221	226	P	X				
	1222	285	P	X		X		Kidney
	1223	291	P	X				
	1224	225	P	X				
	1225	269	P	X				
	1226	374	P	X		X		Lymph nodes
	1227	299	PMA					
	1228	295	PMA					
	1229	284	P	X		X		
	1230	310	P	X				
	1231	276	P	X		X		
	1232	311	SE	X				
	1233	290	P	X		X		
	1234	297	P	X				
	1235	308	P	X				

TABLE XII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Mice

Group	Animal Number	Days on Test	Mortality					
			Data	Liver	Spleen	Lung	Skin	Misc.
T-II continued	1236	348	P	X		X		
	1237	340	P	X				
	1238	317	P	X		X		
	1239	268	P					Kidney
	1240	292	P	X		X		
	1241	143	P					
	1242	368	P	X				
	1243	303	P	X				
	1244	302	P	X		X		
	1245	310	P	X		X		
	1246	389	P					
	1247	268	P	X				
	1248	288	PMA					
	1249	300	PMA					
	1250	340	P	X				
	1251	290	P	X		X		
	1252	258	P	X		X		
	1253	258	PMA					
	1254	271	P	X				
	1255	282	P	X		X		
	1256	264	P	X		X		
	1257	401	P	X				Mesenteric nodes
	1258	292	P	X		X		
	1259	303	P	X				
	1260	304	PMA					
	1261	287	P	X		X		
	1262	313	P	X		X		
	1263	383	P	X		X		
	1264	244	P	X		X		
	1265	299	PMA					
	1266	276	P	X		X		
	1267	249	PMA					
	1268	180	P					
	1269	302	P	X		X		
	1270	303	P	X		X		

TABLE XII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Mice

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
T-II continued	1271	283	P	X		X		
	1272	258	PMA					
	1273	339	P	X		X		
	1274	324	P	X				
	1275	317	P	X		X		
	1276	218	P	X		X		
	1277	261	P	X		X		Lymph nodes
	1278	273	PMA					
	1279	288	P	X		X		
	1280	288	PMA					
	1281	265	PMA					
	1282	289	P	X		X		
	1283	289	P	X		X	X	
	1284	286	P	X				
	1285	145	PMA					
	1286	277	P	X		X		
	1287	248	P	X		X		
	1288	284	P	X		X		Kidney
	1289	197	P	X				
	1290	305	P	X				
	1291	91	ESC					
	1292	91	ESC					
	1293	255	P	X		X		
	1294	306	P	X				
	1295	253	P	X		X		
	1296	214	SE			X		Salivary glands
	1297	298	PMA					
	1298	234	P	X		X		
	1299	294	PMA					
	1300	294	P	X		X		

TABLE XII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Mice

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
T-III	1401	143	PMA					
	1402	248	P	X				
	1403	276	P	X		X		
	1404	264	P	X		X		
	1405	169	P					
	1406	93	C					
	1407	219	SE	X				
	1408	130	PMA					
	1409	208	P	X		X		
	1410	306	P	X		X		
	1411	304	P	X		X		
	1412	312	S	X				
	1413	277	PMA					
	1414	312	S	X		X		
	1415	221	PMA					
	1416	273	P	X		X		
	1417	248	SE	X		X		
	1418	280	P	X		X		
	1419	255	P			X		
	1420	239	P	X		X		
	1421	237	P	X				
	1422	274	P	X		X		Mesentery
	1423	288	P	X		X		
	1424	220	P	X		X		
	1425	245	P	X				
	1426	234	P			X		
	1427	274	P	X		X		
	1428	236	P	X		X		
	1429	282	P	X		X		
	1430	127	PMA					
	1431	290	P	X		X		
	1432	211	P			X		
	1433	291	P	X		X		
	1434	235	P	X				
	1435	254	SE	X		X		

TABLE XII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Mice

Group	Animal Number	Days on Test	Mortality					
			Data	Liver	Spleen	Lung	Skin	Misc.
T-III continued	1436	257	P	X		X		
	1437	121	PMA					
	1438	310	SE			X		
	1439	312	S	X		X		
	1440	258	P	X		X		
	1441	179	PMA					
	1442	220	PMA					
	1443	121	PMA					
	1444	254	P	X		X		
	1445	288	P	X		X		
	1446	287	P	X		X		
	1447	230	P	X				
	1448	165	PMA					
	1449	108	PMA					
	1450	144	PMA					
	1451	278	P	X		X		
	1452	311	P	X		X		
	1453	252	PMA					
	1454	290	PMA					
	1455	295	P	X		X		Kidney
	1456	254	PMA					
	1457	311	P	X		X		
	1458	267	SE	X		X		
	1459	241	P	X				
	1460	215	PMA					
	1461	258	PMA					
	1462	252	PMA					
	1463	248	PMA					
	1464	274	P	X		X		
	1465	312	S	X		X		Mesentery
	1466	302	P	X		X		
	1467	255	P	X		X		
	1468	281	P	X				
	1469	310	P	X		X		
	1470	277	P	X		X		Kidney

TABLE XII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Mice

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
T-III continued	1471	243	PMA					
	1472	240	P	X		X		
	1473	241	P	X		X		
	1474	263	P	X		X		
	1475	260	PMA					
	1476	302	PMA					
	1477	265	PMA					
	1478	198	PMA					
	1479	226	PMA					
	1480	250	P	X		X		
	1481	260	PMA					
	1482	287	PMA					
	1483	283	P	X		X		
	1484	231	PMA					
	1485	224	PMA					
	1486	312	S	X		X		Mesentery Cervix
	1487	266	PMA					
	1488	276	P	X		X		
	1489	236	PMA					
	1490	229	P			X		
	1491	148	PMA					
	1492	230	PMA					
	1493	306	PMA					
	1494	194	P	X		X		
	1495	241	PMA					
	1496	312	S	X		X		
	1497	325	PMA					
	1498	262	P	X		X	X	
	1499	221	P	X				
	1500	224	PMA					

TABLE XII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Mice

Group	Animal Number	Days on Test	Mortality					
			Data	Liver	Spleen	Lung	Skin	Misc.
Untreated	901	428	PMA					
Control	902	308	P					
	903	345	P					
	904	266	P					
	905	266	P					
	906	390	PMA					
	907	522	P					
	908	511	P					
	909	511	PMA					
	910	641	PMA					
	911		A					
	912	564	PMA					
	913	616	P					
	914	435	PMA					
	915	313	PMA					
	916	564	PMA					
	917	405	PMA					
	918	664	PMA					
	919	325	PMA					
	920	508	PMA					
	921	392	P					
	922	571	P					
	923	364	PMA					
	924	202	PMA					
	925	579	PMA					
	926	702	PMA					
	927	647	PMA					
	928	511	P					
	929	665	P					
	930	547	PMA					
	931	669	P					
	932	367	SE					
	933	392	PMA					
	934		A					
	935	511	PMA					

TABLE XII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Mice

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
Untreated	936	99	P					
Control	937	209	PMA					
continued	938	427	P					
	939	271	P					
	940	582	PMA					
	941	326	P					
	942	492	P					
	943	511	PMA					
	944	374	P					Uterus
	945	572	PMA					
	946	511	PMA					
	947	666	P					
	948	579	PMA					
	949		A					
	950	709	PMA					
	951	321	PMA					
	952		A					
	953	471	P					
	954	440	SE					
	955		A					
	956	423	P					
	957	579	PMA					
	958	551	PMA					
	959	432	P					
	960	209	PMA					
	961	371	P					
	962	315	P					
	963	486	PMA					
	964	672	PMA					
	965	578	P					
	966	714	PMA					
	967	450	P					
	968	574	P					
	969	322	PMA					X
	970	575	P					

TABLE XII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Mice

Group	Animal Number	Days on Test	Mortality					
			Data	Liver	Spleen	Lung	Skin	Misc.
Untreated	971	569	P					
Control	972	449	P					
continued	973	500	PMA					
	974	508	P					
	975	526	PMA					
	976	408	PMA					
	977	416	PMA					
	978	526	PMA					
	979	300	P					
	980	572	PMA					
	981	405	PMA					
	982	374	P					
	983	434	PMA					
	984	500	PMA					
	985	579	P					
	986	372	PMA					X
	987	667	PMA					
	988	504	P					
	989	573	PMA					
	990	452	P					
	991	522	PMA					
	992	429	P					
	993	94	P					
	994	547	P					
	995	598	PMA					
	996	666	P					
	997	662	PMA					
	998	577	PMA					
	999	439	PMA					
	1000	467	P					

TABLE XII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Mice

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
T-I	1101	271	PMA					
	1102	435	P			X	X	
	1103	375	P				X	
	1104	307	P			X	X	Mesentery
	1105	338	SE	X		X	X	
	1106	329	PMA					
	1107	380	P					Kidney
	1108	359	P			X		
	1109	316	P			X	X	Kidney
	1110	192	P			X	X	
	1111	354	P			X	X	Mesenteric nodes
	1112	498	S				X	
	1113	414	P	X			X	
	1114	368	P					
	1115	377	P	X				
	1116	402	P				X	
	1117	264	PMA					
	1118	262	SE				X	
	1119	196	P	X				
	1120	374	P					Kidney
	1121	343	P				X	
	1122	423	P	X			X	Kidney
	1123	323	P				X	Uterus
	1124	333	P	X			X	
	1125	396	PMA					
	1126	249	PMA					
	1127	349	P	X			X	Kidney
	1128	354	P					
	1129	462	P			X		
	1130	308	PMA					
	1131	416	PMA					
	1132	329	P	X		X	X	
	1133	360	P	X			X	
	1134	85	C					
	1135	382	P	X				

TABLE XII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Mice

Group	Animal Number	Days on Test	Mortality		Liver	Spleen	Lung	Skin	Misc.
			Data						
T-I continued	1136	325	P		X			X	
	1137	246	PMA						
	1138	187	P		X				
	1139	232	PMA					X	
	1140	353	P		X				
	1141	340	SE		X		X	X	Mesenteric nodes
	1142	444	P						
	1143	351	P		X				Mesenteric nodes
	1144	236	P				X		
	1145	370	P						Mesentery
	1146	309	P				X	X	
	1147	398	P			X			Mesentery
	1148	450	PMA					X	
	1149	356	P					X	
	1150	429	P						
	1151	380	P				X		
	1152	54	C						
	1153	388	P		X		X	X	Mesentery
	1154	353	P		X				Mesenteric nodes Kidney
	1155	388	PMA						
	1156	260	SE				X	X	
	1157	388	P						
	1158	382	P						Kidney
	1159	294	P					X	
	1160	309	P						Stomach
	1161	416	PMA						
	1162	416	PMA						
	1163	253	P		X		X	X	
	1164	320	P		X		X		
	1165	347	PMA						
	1166	373	P						
	1167	283	P				X	X	
	1168	380	P						Mesenteric nodes
	1169	449	PMA						
	1170	55	C						

TABLE XII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Mice

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
T-I continued	1171	55	C					
	1172	304	SE			X	X	
	1173	416	PMA					
	1174	355	P			X	X	
	1175	319	P	X		X	X	
	1176	218	PMA					
	1177	428	P				X	Ovary
	1178	341	P			X		Uterus
	1179	320	P	X		X		
	1180	341	P				X	Kidney
	1181	290	P	X		X	X	
	1182	342	P	X		X		
	1183	295	P					
	1184	397	P					
	1185	373	P				X	
	1186	284	PMA					
	1187	295	P					Kidney
	1188	355	PMA					
	1189	343	PMA				X	
	1190	339	P					Kidney, Cervix
	1191	261	PMA				X	
	1192	305	PMA					
	1193	308	P			X	X	
	1194	309	P	X				Uterus
	1195	247	P			X	X	
	1196	323	P			X		Mesenteric nodes
	1197	416	PMA					
	1198	123	PMA					
	1199	498	S					Kidney
	1200	202	P			X	X	

TABLE XII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Mice

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
T-II	1301	95	P					
	1302	259	P	X			X	
	1303	258	P	X		X		
	1304	240	P	X		X		
	1305	290	P	X		X		
	1306	226	P					
	1307	228	P	X				
	1308	296	P	X		X	X	
	1309	190	P	X				
	1310	265	P	X				
	1311	231	P			X		
	1312	327	PMA					
	1313	373	P	X			X	
	1314	214	PMA					
	1315	270	PMA					
	1316	257	P	X		X		
	1317	278	P	X		X		Lymph nodes
	1318	270	P	X		X		
	1319	255	P	X				
	1320	333	P	X				
	1321	236	P				X	
	1322	237	P	X				
	1323	316	P	X				
	1324	278	P	X		X		
	1325	275	P	X		X		
	1326	277	P	X		X		
	1327	230	PMA					
	1328	250	P	X		X		
	1329	218	P					
	1330	276	P	X		X		
	1331	299	P	X		X		
	1332	222	P	X		X		Mesenteric nodes
	1333	258	P	X				
	1334	278	P	X		X		
	1335	278	P	X		X		

TABLE XII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Mice

Group	Animal Number	Days on Test	Mortality					
			Data	Liver	Spleen	Lung	Skin	Misc.
T-II continued	1336	227	PMA					
	1337	214	PMA					
	1338	230	P	X				
	1339	305	PMA					
	1340	275	P	X		X		
	1341	206	P	X		X		
	1342	285	P	X				
	1343	179	PMA					
	1344	270	P	X				
	1345	220	P	X		X		
	1346	275	P	X		X		
	1347	177	P				X	
	1348	298	P	X		X		
	1349	261	P	X				
	1350	208	P	X		X		
	1351	216	P	X		X		
	1352	315	P	X		X	X	
	1353	274	P	X		X		
	1354	252	P	X				
	1355	271	P	X		X		
	1356	307	P				X	
	1357	224	P	X			X	
	1358	241	P	X				
	1359	278	P	X		X		
	1360	264	P	X		X		
	1361	245	PMA					
	1362	259	P			X		
	1363	430	P	X		X	X	
	1364	244	P	X		X		
	1365	310	P	X		X		
	1366	269	P	X		X	X	
	1367	335	P	X		X		
	1368	287	P			X	X	
	1369	258	P	X		X		
	1370	276	P	X		X	X	

TABLE XII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Mice

Group	Animal Number	Days on Test	Mortality					
			Data	Liver	Spleen	Lung	Skin	Misc.
T-II continued	1371	293	P	X		X		
	1372	316	P	X		X		
	1373	250	P	X				
	1374	322	PMA					
	1375	322	PMA					
	1376	262	P	X			X	
	1377	316	P	X				
	1378	234	P	X				
	1379	256	P	X		X		
	1380	369	P	X		X	X	
	1381	278	P	X		X		Kidney
	1382	205	P	X				
	1383	232	P	X		X		
	1384	275	P	X		X		
	1385	176	PMA					
	1386	217	P	X		X		
	1387	340	P	X		X		Kidney
	1388	273	P	X		X		
	1389	295	P	X				
	1390	251	PMA					
	1391	256	P	X		X		
	1392	183	P	X				
	1393	272	P	X				
	1394	297	P	X		X		
	1395	329	PMA					
	1396	498	S					
	1397	277	P				X	
	1398	498	S					
	1399	212	P			X	X	
	1400	448	PMA					

TABLE XII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Mice

Group	Animal Number	Days on Test	Mortality					
			Data	Liver	Spleen	Lung	Skin	Misc.
T-III	1501	205	P	X				
	1502	225	P	X		X		
	1503	258	P	X		X		
	1504	221	P	X		X		
	1505	206	P	X		X		
	1506	157	PMA					
	1507	294	P	X		X		
	1508	229	SE	X		X	X	
	1509	220	P	X		X		
	1510	258	P	X		X		
	1511	272	PMA					
	1512	215	P	X		X		
	1513	284	P	X		X		
	1514	283	P	X		X		
	1515	295	P	X		X		
	1516	256	SE	X		X		
	1517	302	PMA					
	1518	293	PMA					
	1519	312	S	X		X		Mesentery
	1520	263	P	X		X		
	1521	275	P	X		X		
	1522	312	S	X		X		
	1523	222	P	X		X	X	
	1524	277	P	X		X	X	
	1525	312	S	X		X	X	
	1526	312	S	X		X		
	1527	256	SE	X			X	
	1528	252	P	X		X		
	1529	265	P	X		X		
	1530	276	P	X		X		
	1531	195	P				X	
	1532	179	P			X		
	1533	228	P					
	1534	222	SE	X		X	X	
	1535	210	P	X		X		

TABLE XII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Mice

Group	Animal Number	Days on Test	Mortality					
			Data	Liver	Spleen	Lung	Skin	Misc.
T-III continued	1536	276	P	X		X		
	1537	263	PMA					
	1538	178	P	X		X		
	1539	227	P					
	1540	232	P	X		X		
	1541	247	P	X		X		
	1542	253	P	X		X		
	1543	208	SE	X		X		
	1544	208	S	X		X		
	1545	312	S	X		X		Mesentery
	1546	208	P	X			X	
	1547	276	P			X		
	1548	263	P	X		X		
	1549	276	P	X		X		
	1550	260	PMA					
	1551	282	PMA					
	1552	295	P	X		X	X	
	1553	269	P	X		X	X	
	1554	267	PMA					
	1555	224	P	X		X		
	1556	254	SE	X		X	X	
	1557	278	P	X		X		
	1558	273	P	X		X		
	1559	261	P	X		X		
	1560	275	P	X		X		
	1561	294	P	X		X		
	1562	180	P	X				
	1563	235	P	X		X		
	1564	298	P	X		X	X	Ovary Kidney
	1565	206	P	X				
	1566	240	PMA					
	1567	220	P	X		X	X	
	1568	309	P	X		X	X	Ureter
	1569	191	P	X				
	1570	312	S	X		X		Mesentery Ovary

TABLE XII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Mice

Group	Animal Number	Days on Test	Mortality		Liver	Spleen	Lung	Skin	Misc.
			Data						
T-III continued	1571	265	P		X		X		
	1572	257	P		X		X		
	1573	255	SE		X		X	X	
	1574	194	P		X		X		
	1575	221	P		X		X		
	1576	243	P		X				
	1577	212	SE		X		X	X	
	1578	250	SE		X		X	X	
	1579	269	P		X				
	1580	273	PMA						
	1581	259	PMA						
	1582	290	P		X		X		
	1583	272	P		X		X		
	1584	299	P		X		X		
	1585	295	PMA						
	1586	239	PMA						
	1587	239	P		X				
	1588	197	P		X				
	1589	264	PMA						
	1590	248	P		X				
	1591	226	P		X				
	1592	113	PMA						
	1593	202	P		X				
	1594	240	P		X		X		
	1595	236	PMA						
	1596	118	PMA						
	1597	240	P		X		X		Salivary glands
	1598	190	P		X				
	1599	268	SE		X		X	X	
	1600	264	P		X	X	X		

TABLE XIII

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Hamsters

Group	Animal Number	Days on Test	Mortality					Skin	Misc.
			Data	Liver	Spleen	Lung			
Untreated	1601		A						
Control	1602	447	PMA						
	1603	591	P						
	1604	591	P						
	1605	452	P						
	1606	529	PMA						
	1607	492	P						
	1608	596	SE						
	1609	565	P						
	1610		A						
	1611	591	P						
	1612		A						
	1613		A						
	1614	64	PMA						
	1615		A						
	1616		A						
	1617	8	C						
	1618	697	P						
	1619	46	C						
	1620		A						
	1621		A						
	1622	649	P						
	1623	536	P						
	1624		A						
	1625	698	P						
	1626		A						
	1627	107	PMA						
	1628	107	PMA						
	1629	44	PMA						
	1630	186	PMA						
	1631	151	PMA						
	1632	83	PMA						
	1633	51	C						
	1634	96	PMA						
	1635	54	C						

TABLE XIII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Hamsters

Group	Animal Number	Days on Test	Mortality					Misc.
			Data	Liver	Spleen	Lung	Skin	
Untreated	1636	99	PMA					
Control	1637	99	PMA					
continued	1638	136	PMA					
	1639	207	PMA					
	1640	199	PMA					
	1641	199	PMA					
	1642	40	PMA					
	1643	66	PMA					
	1644	123	PMA					
	1645	123	PMA					
	1646	88	PMA					
	1647	201	PMA					
	1648	177	PMA					
	1649	157	PMA					
	1650	541	P					
	1651	363	PMA					
	1652	157	PMA					
	1653		A					
	1654	395	P					
	1655	61	PMA					
	1656	2	C					
	1657	169	P					
	1658	688	P					
	1659	2	C					
	1660	14	PMA					
	1661		A					
	1662	524	P					
	1663	591	P					
	1664	55	PMA					
	1665	14	C					
	1666	363	P					
	1667	11	C					
	1668	576	P					
	1669	519	PMA					
	1670	708	P					

TABLE XIII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Hamsters

Group	Animal Number	Days on Test	Mortality					Misc.
			Data	Liver	Spleen	Lung	Skin	
Untreated	1671	695	P					
Control	1672	243	P					
continued	1673		A					
	1674		A					
	1675		A					
	1676	701	P					
	1677	686	P					
	1678	479	PMA					
	1679	593	P					
	1680	436	P					
	1681		A					
	1682	575	P					
	1683		A					
	1684		A					
	1685	325	PMA					
	1686	511	P					
	1687	651	P					
	1688	246	PMA					
	1689	108	PMA					
	1690	108	PMA					
	1691	529	P					
	1692	430	P					
	1693		A					
	1694	530	P					
	1695	467	P					
	1696	319	PMA					
	1697	503	P					
	1698	121	P					
	1699		A					
	1700	303	PMA					

TABLE XIII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Hamsters

Group	Animal Number	Days on Test	Mortality					Misc.
			Data	Liver	Spleen	Lung	Skin	
T-I	1801		A					
	1802		A					
	1803	666	P					Kidney
	1804	61	C					
	1805	59	C					
	1806	85	P					
	1807	44	PMA					
	1808	382	P					
	1809	371	P					
	1810	589	P	X				
	1811	100	PMA					
	1812	100	PMA					
	1813	533	P					
	1814	575	P	X				Lymph nodes
	1815	622	P					
	1816	631	P	X				Kidney
	1817	137	PMA					
	1818	191	PMA					
	1819	148	PMA					
	1820	100	PMA					
	1821	65	PMA					
	1822	164	PMA					
	1823	111	PMA					
	1824	175	PMA					
	1825	607	P					Kidney
	1826	523	PMA					
	1827	51	C					
	1828	375	PMA					
	1829	649	P	X				Kidney
	1830		A					
	1831	607	P				X	
	1832	377	PMA					
	1833	108	PMA					
	1834	108	PMA					
	1835	108	PMA					
	1836	108	PMA					

TABLE XIII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Hamsters

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
T-I	1837	614	P					
continued	1838	108	PMA					
	1839		A					
	1840	4	C					
	1841		A					
	1842	696	PMA					
	1843	386	P					
	1844	14	C					
	1845	64	PMA					
	1846	420	PMA					
	1847	373	PMA					
	1848	635	P					
	1849	47	PMA					
	1850	47	PMA					
	1851	47	C					
	1852	572	P	X				
	1853	574	P	X			X	Kidney
	1854	531	P					
	1855	72	C					
	1856	248	PMA					
	1857	77	PMA					
	1858	94	PMA					
	1859	109	PMA					
	1860	141	PMA					
	1861	196	P					
	1862	101	PMA					
	1863	632	S	X	X			
	1864	206	PMA					
	1865	206	PMA					
	1866	206	PMA					
	1867	206	PMA					
	1868	312	P					
	1869	570	PMA					
	1870		A					
	1871	202	PMA					
	1872	55	PMA					

TABLE XIII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Hamsters

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
T-I continued	1873	64	PMA					
	1874	24	C					
	1875	485	P	X				
	1876	29	C					
	1877	460	P	X	X			Kidney
	1878	684	P					
	1879		A					
	1880	684	P					
	1881		A					
	1882	711	P			X		Kidney
	1883	611	P				X	
	1884		A					
	1885		A					
	1886	279	P					
	1887	555	P					
	1888	597	P	X				
	1889	616	P	X				
	1890		A					
	1891	45	C					
	1892	45	C					
	1893	576	P					
	1894	587	P					
	1895	310	SE					
	1896		A					
	1897	289	PMA					
	1898		A					
	1899	347	PMA					
	1900		A					

TABLE XIII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Hamsters

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
T-II	2001	107	PMA					
	2002	36	PMA					
	2003	298	PMA					
	2004	201	P					
	2005	101	PMA					
	2006	162	PMA					
	2007	86	PMA					
	2008	95	PMA					
	2009	113	PMA					
	2010	48	PMA					
	2011	24	PMA					
	2012	6	PMA					
	2013	109	PMA					
	2014	48	PMA					
	2015	424	PMA					
	2016	632	S					
	2017	100	PMA					
	2018	203	PMA					
	2019	40	PMA					
	2020	186	PMA					
	2021	129	PMA					
	2022	83	PMA					
	2023	61	PMA					
	2024	111	PMA					
	2025	100	PMA					
	2026	100	PMA					
	2027	100	PMA					
	2028	100	PMA					
	2029	100	PMA					
	2030	594	P					
	2031	100	PMA					
	2032	100	PMA					
	2033	632	S					
	2034	632	S					
	2035	590	P					
	2036	589	P					

TABLE XIII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Hamsters

Group	Animal Number	Days on Test	Mortality					Skin	Misc.
			Data	Liver	Spleen	Lung			
T-II continued	2037	632	S						
	2038	90	C						
	2039	370	P						Mesentery
	2040	238	P						
	2041	208	PMA						
	2042	225	P	X					
	2043	107	PMA						
	2044	64	PMA						
	2045	238	P						
	2046	85	C						
	2047	288	PMA						
	2048	486	P						
	2049	46	C						
	2050	249	P						
	2051	415	P		X				
	2052	561	P						
	2053	532	P						
	2054	632	S						
	2055	244	P						Kidney
	2056	576	P						
	2057	588	P						
	2058	9	C						
	2059	10	PMA						
	2060	41	PMA						
	2061	33	PMA						
	2062	9	C						
	2063	12	PMA						
	2064	221	PMA						
	2065	221	PMA						
	2066	7	C						
	2067	10	C						
	2068	632	S						
	2069	171	P						
	2070	391	P	X	X	X			
	2071	108	PMA						
	2072	108	PMA						

TABLE XIII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Hamsters

Group	Animal Number	Days on Test	Mortality					
			Data	Liver	Spleen	Lung	Skin	Misc.
T-II continued	2073	632	S					
	2074	469	P				X	
	2075	44	C					
	2076	632	S	X				
	2077	7	C					
	2078	632	PMA					
	2079	101	PMA					
	2080	101	PMA					
	2081	127	P					
	2082	632	S	X	X			
	2083	93	C					
	2084	632	S	X	X			Kidney
	2085	107	PMA					
	2086	100	PMA					
	2087	44	PMA					
	2088	158	PMA					
	2089	44	PMA					
	2090	590	P					
	2091	582	P	X	X			
	2092	632	S					
	2093	632	S		X	X	X	
	2094	9	C					
	2095	388	P					
	2096	32	C					
	2097	528	P	X				
	2098	535	P				X	
	2099	632	S					
	2100	99	P					

TABLE XIII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Hamsters

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
T-III	2201	348	P	X				
	2202	54	C					
	2203	405	P		X			Pancreas
	2204	192	PMA					
	2205	219	P	X				
	2206	434	P			X		
	2207	231	PMA					
	2208	101	P					
	2209	206	PMA					
	2210	417	P	X				
	2211	350	P	X				
	2212	108	PMA					
	2213	367	PMA					
	2214	422	P	X	X	X		
	2215	582	P	X	X			
	2216	179	P					
	2217	552	P		X			
	2218	422	PMA					
	2219	219	PMA					
	2220	196	P					
	2221	386	PMA					
	2222	346	P	X				
	2223	346	PMA					
	2224	346	PMA					
	2225	496	P	X				
	2226	365	SE	X				
	2227	100	P					
	2228	305	PMA					
	2229	330	P	X				
	2230	441	P	X		X		
	2231	377	P	X				
	2232	189	P					
	2233	422	P					
	2234	340	P					Thymus
	2235	16	C					

TABLE XIII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Hamsters

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
T-III continued	2236	339	P					
	2237	591	S	X				
	2238	529	P					
	2239	478	PMA					
	2240	270	PMA					
	2241	517	P	X				
	2242	590	P					
	2243	591	PMA					
	2244	100	PMA					
	2245	477	P	X				
	2246	484	P	X		X		
	2247	139	PMA					
	2248	404	P	X				
	2249	147	PMA					
	2250	373	P	X				
	2251	46	C					
	2252	137	P					
	2253	149	P					
	2254	278	P	X				
	2255	295	P	X				
	2256	361	PMA					
	2257	395	P	X		X		Kidney
	2258	547	PMA					
	2259	591	S	X	X			
	2260	591	S	X				
	2261	508	SE	X	X			
	2262	46	C					
	2263	408	P	X				
	2264	474	PMA					
	2265	270	PMA					
	2266	373	P	X				
	2267	372	PMA					
	2268	39	C					
	2269	176	PMA					
	2270	351	P	X				

TABLE XIII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Male Hamsters

Group	Animal Number	Days on Test	Mortality					Misc.
			Data	Liver	Spleen	Lung	Skin	
T-III	2271	324	P			X		
continued	2272	54	C					
	2273	338	P					
	2274	411	P	X		X		
	2275	591	S	X	X			
	2276	569	PMA					
	2277	323	SE				X	
	2278	155	PMA					
	2279	85	ESC					
	2280	85	ESC					
	2281	85	ESC					
	2282	64	ESC					
	2283	85	ESC					
	2284	64	ESC					
	2285	385	P					
	2286	286	P	X				
	2287	26	C					
	2288	360	P	X				Kidney
	2289	330	PMA					
	2290	448	P	X				
	2291	438	PMA					
	2292	438	P	X				Mesentery
	2293	326	PMA					
	2294	359	PMA					
	2295	591	S					
	2296	211	PMA					
	2297	285	PMA					
	2298	38	C					
	2299	155	PMA					
	2300	99	PMA					

TABLE XIII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Hamsters

Group	Animal Number	Days on Test	Mortality					Misc.
			Data	Liver	Spleen	Lung	Skin	
Untreated	1701	632	S					
Control	1702	632	S					
	1703	23	C					
	1704	43	PMA					
	1705	414	P					
	1706	426	P					
	1707	559	P					
	1708	108	PMA					
	1709	95	PMA					
	1710	137	PMA					
	1711	95	PMA					
	1712	7	C					
	1713	7	PMA					
	1714	68	PMA					
	1715	104	PMA					
	1716	116	P					
	1717	137	PMA					
	1718	505	P					
	1719	591	P					
	1720	629	P					
	1721	495	P					
	1722	130	PMA					
	1723	589	P					
	1724	404	P					
	1725	91	PMA					
	1726	131	PMA					
	1727	128	PMA					
	1728	410	PMA					
	1729	127	PMA					
	1730	127	PMA					
	1731	454	P	X				Kidney
	1732	23	PMA					
	1733	70	C					
	1734	104	PMA					
	1735	271	PMA					

TABLE XIII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Hamsters

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
Untreated	1736	411	PMA					
Control	1737	103	PMA					
continued	1738	411	PMA					
	1739	97	PMA					
	1740	611	P					
	1741	168	PMA					
	1742	351	PMA					
	1743	79	C					
	1744	415	P					
	1745	52	C					
	1746	54	C					
	1747	592	P					
	1748	530	P					
	1749	118	PMA					
	1750	186	P					
	1751	65	PMA					
	1752	30	C					
	1753	233	PMA					
	1754	53	C					
	1755	194	PMA					
	1756	373	PMA					
	1757	59	PMA					
	1758	595	P	X				Ovary
	1759	208	PMA					
	1760	147	PMA					
	1761	147	PMA					
	1762	89	PMA					
	1763	307	PMA					
	1764	53	C					
	1765	582	PMA					
	1766	541	P					
	1767	567	P	X				
	1768	575	P					
	1769	47	C					
	1770	367	PMA					
	1771	116	PMA					
	1772	116	PMA					

TABLE XIII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Hamsters

Group	Animal Number	Days on Test	Mortality					Misc.
			Data	Liver	Spleen	Lung	Skin	
Untreated	1773	193	P					
Control	1774	198	P					
continued	1775	249	P					
	1776	267	PMA					
	1777	283	PMA					
	1778	114	PMA					
	1779	190	PMA					
	1780	362	PMA					
	1781	340	PMA					
	1782	314	PMA					
	1783	38	C					
	1784	200	P					
	1785	587	P					
	1786	27	PMA					
	1787	341	PMA					
	1788	43	C					
	1789	571	P	X				
	1790	464	P					
	1791	193	PMA					
	1792	435	P					
	1793	14	C					
	1794	400	PMA					
	1795	542	P					
	1796	536	P	X				
	1797	506	P					
	1798	539	P					
	1799	547	P					
	1800	531	PMA					

TABLE XIII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Hamsters

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
T-I	1901	104	PMA					
	1902	187	PMA					
	1903	188	PMA					
	1904	141	PMA					
	1905	394	PMA					
	1906	153	PMA					
	1907	200	PMA					
	1908	57	PMA					
	1909	84	PMA					
	1910	200	P					
	1911	113	PMA					
	1912	201	P					
	1913	108	PMA					
	1914	120	PMA					
	1915	131	PMA					
	1916	164	PMA					
	1917	580	P	X				Kidney
	1918	49	PMA					
	1919	49	PMA					
	1920	131	PMA					
	1921	106	PMA					
	1922	311	P					
	1923	119	PMA					
	1924	119	PMA					
	1925	119	PMA					
	1926	133	PMA					
	1927	61	PMA					
	1928	52	PMA					
	1929	127	PMA					
	1930	572	P	X			X	
	1931	578	P					
	1932	94	PMA					
	1933	81	PMA					
	1934	74	PMA					
	1935	126	PMA					
	1936	191	PMA					

TABLE XIII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Hamsters

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
T-I continued	1937	191	PMA					
	1938	180	PMA					
	1939	185	PMA					
	1940	66	PMA					
	1941	473	P					
	1942	553	P					
	1943	417	PMA					
	1944	54	C					
	1945	493	P					
	1946	435	P					
	1947	451	P			X		
	1948	608	P					
	1949	47	C					
	1950	53	C					
	1951	83	PMA					
	1952	467	P	X				Ovaries
	1953	476	PMA					
	1954	313	PMA					
	1955	47	C					
	1956	51	PMA					
	1957	59	C					
	1958	578	P					
	1959	632	S	X				
	1960	544	P					
	1961	632	S	X				
	1962	40	ESC					
	1963	56	PMA					
	1964	86	C					
	1965	174	PMA					
	1966	33	C					
	1967	31	C					
	1968	107	PMA					
	1969	178	PMA					
	1970	592	P	X				
	1971	397	PMA					
	1972	411	P	X				

TABLE XIII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Hamsters

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
T-I	1973	524	P					
continued	1974	14	C					
	1975	467	P					Ovaries
	1976	31	C					
	1977	371	P					
	1978	487	P					
	1979	86	PMA					
	1980	577	P					
	1981	581	P					
	1982	494	P					
	1983	424	P					
	1984	542	P				X	
	1985	94	PMA					
	1986	128	PMA					
	1987	207	PMA					
	1988	193	PMA					
	1989	65	PMA					
	1990	389	PMA					
	1991	55	C					
	1992	488	P					
	1993	493	P					
	1994	24	C					
	1995	191	P					
	1996	632	S	X				Ovaries
	1997	33	PMA					
	1998	144	PMA					
	1999	603	P					
	2000	88	ESC					

TABLE XIII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Hamsters

Group	Animal Number	Days on Test	Mortality					
			Data	Liver	Spleen	Lung	Skin	Misc.
T-II	2101	602	P				X	
	2102	9	C					
	2103	486	P					
	2104	545	P					
	2105	476	PMA					
	2106	553	P	X				Kidney
	2107	451	P	X				
	2108	392	P	X				
	2109	514	P					Kidney
	2110	578	P				X	
	2111	570	P					
	2112	336	PMA					
	2113	52	C					
	2114	476	P					
	2115	632	S					
	2116	529	P					Mesentery
	2117	52	C					
	2118	632	S	X	X		X	
	2119	87	C					
	2120	60	C					
	2121	39	ESC					
	2122	509	PMA					
	2123	632	S				X	
	2124	39	ESC					
	2125	446	P				X	Cervix
	2126	221	P					
	2127	562	P					
	2128	576	P					
	2129	286	P					
	2130	513	P	X				
	2131	129	PMA					
	2132	495	P	X			X	
	2133	173	PMA					
	2134	208	P					
	2135	447	P					
	2136	413	PMA					

TABLE XIII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Hamsters

Group	Animal Number	Days on Test	Mortality					Misc.
			Data	Liver	Spleen	Lung	Skin	
T-II continued	2137	29	C					
	2138	47	C					
	2139	359	PMA					
	2140	29	C					
	2141	39	C					
	2142	522	P				X	
	2143	68	C					
	2144	36	C					
	2145	36	C					
	2146	522	P				X	
	2147	104	PMA					
	2148	603	P	X				
	2149	46	C					
	2150	628	P			X	X	
	2151	426	P	X				
	2152	307	PMA					
	2153	632	S					
	2154	614	P	X				
	2155	207	P					
	2156	542	P	X			X	
	2157	632	S					Thymus Ovaries
	2158	564	P					
	2159	614	P	X				
	2160	473	PMA					
	2161	96	PMA					
	2162	96	PMA					
	2163	96	PMA					
	2164	534	PMA					
	2165	541	P				X	
	2166	200	P					
	2167	485	P					
	2168	196	P					
	2169	468	P					
	2170	632	S	X				
	2171	409	P					
	2172	383	P					

TABLE XIII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Hamsters

Group	Animal Number	Days on Test	Mortality					
			Data	Liver	Spleen	Lung	Skin	Misc.
T-II	2173	456	P					
continued	2174	489	P					
	2175	541	P					
	2176	466	P	X				
	2177	462	SE	X	X		X	
	2178	492	P					
	2179	53	C					
	2180	566	P					
	2181	570	P					Kidney
	2182	9	C					
	2183	514	P	X	X		X	Cervix
	2184	520	P					
	2185	202	PMA					
	2186	470	P					
	2187	261	PMA					
	2188	212	PMA					
	2189	194	P					
	2190	245	PMA					
	2191	541	P	X		X		
	2192	536	P					
	2193	29	C					
	2194	193	PMA					
	2195	508	SE	X			X	
	2196	625	P	X				
	2197	596	P					
	2198	632	S	X	X		X	Ovaries
	2199	558	P	X	X			
	2200	547	P	X				

TABLE XIII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Hamsters

Group	Animal Number	Days on Test	Mortality					
			Data	Liver	Spleen	Lung	Skin	Misc.
T-III	2301	9	C					
	2302	74	PMA					
	2303	149	C					
	2304	591	S					
	2305	320	P	X				
	2306	309	PMA					
	2307	314	PMA					
	2308	304	C					
	2309	201	C					
	2310	118	PMA					
	2311	206	PMA					
	2312	201	P					
	2313	390	PMA					
	2314	64	PMA					
	2315	247	PMA					
	2316	300	PMA					
	2317	318	P	X				
	2318	315	PMA					
	2319	249	PMA					
	2320	207	PMA					
	2321	360	PMA					
	2322	381	PMA					
	2323	403	P					
	2324	361	P	X				
	2325	350	P					
	2326	498	S	X	X			
	2327	390	P	X				
	2328	354	P	X		X		
	2329	448	P			X		
	2330	354	P				X	
	2331	398	PMA					
	2332	498	S	X				
	2333	496	P	X				
	2334	411	PMA					
	2335	89	C					

TABLE XIII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Hamsters

Group	Animal Number	Days on Test	Mortality					
			Data	Liver	Spleen	Lung	Skin	Misc.
T-III continued	2336	442	P	X				
	2337	405	PMA					
	2338	399	P	X				
	2339	87	C					
	2340	409	P	X				
	2341	490	P					
	2342	219	PMA					
	2343	286	P					
	2344	403	P	X				
	2345	332	PMA					
	2346	419	PMA					
	2347	403	PMA					
	2348	8	C					
	2349	41	PMA					
	2350	54	C					
	2351	96	PMA					
	2352	118	PMA					
	2353	244	PMA					
	2354	359	P	X	X	X		Stomach
	2355	8	C					
	2356	353	SE	X				
	2357	48	C					
	2358	385	P			X		
	2359	207	PMA					
	2360	352	P	X		X		
	2361	96	PMA					
	2362	100	PMA					
	2363	96	PMA					
	2364	96	PMA					
	2365	96	PMA					
	2366	96	PMA					
	2367	305	PMA					
	2368	439	PMA					
	2369	591	P	X				
	2370	407	PMA					

TABLE XIII continued

TEST MATERIAL: Vinyl Chloride (Ethylene Derived)

Chronic Vapor Inhalation Toxicity Study
Albino Rats, Albino Mice and Golden Hamsters

Suspected Gross Tumor Observations in Female Hamsters

Group	Animal Number	Days on Test	Mortality Data	Liver	Spleen	Lung	Skin	Misc.
T-III	2371	367	PMA					
continued	2372	383	PMA					
	2373	390	PMA					
	2374	379	PMA					
	2375	61	PMA					
	2376	68	PMA					
	2377	53	C					
	2378	264	PMA					
	2379	207	PMA					
	2380	49	PMA					
	2381	38	ESC					
	2382	279	PMA					
	2383	279	PMA					
	2384	306	PMA					
	2385	378	P					
	2386	387	P	X				
	2387	364	PMA					
	2388	207	PMA					
	2389	194	PMA					
	2390	325	P			X		
	2391	38	C					
	2392	364	P	X		X		
	2393	29	C					
	2394	243	P					
	2395	361	PMA					
	2396	29	C					
	2397	41	C					
	2398	84	PMA					
	2399	397	PMA					
	2400	208	PMA					