Dead Storage 1306

Vinyl Chloride: Inhalation and Sulfhydryl Assay. 1973

K-1711-(11)

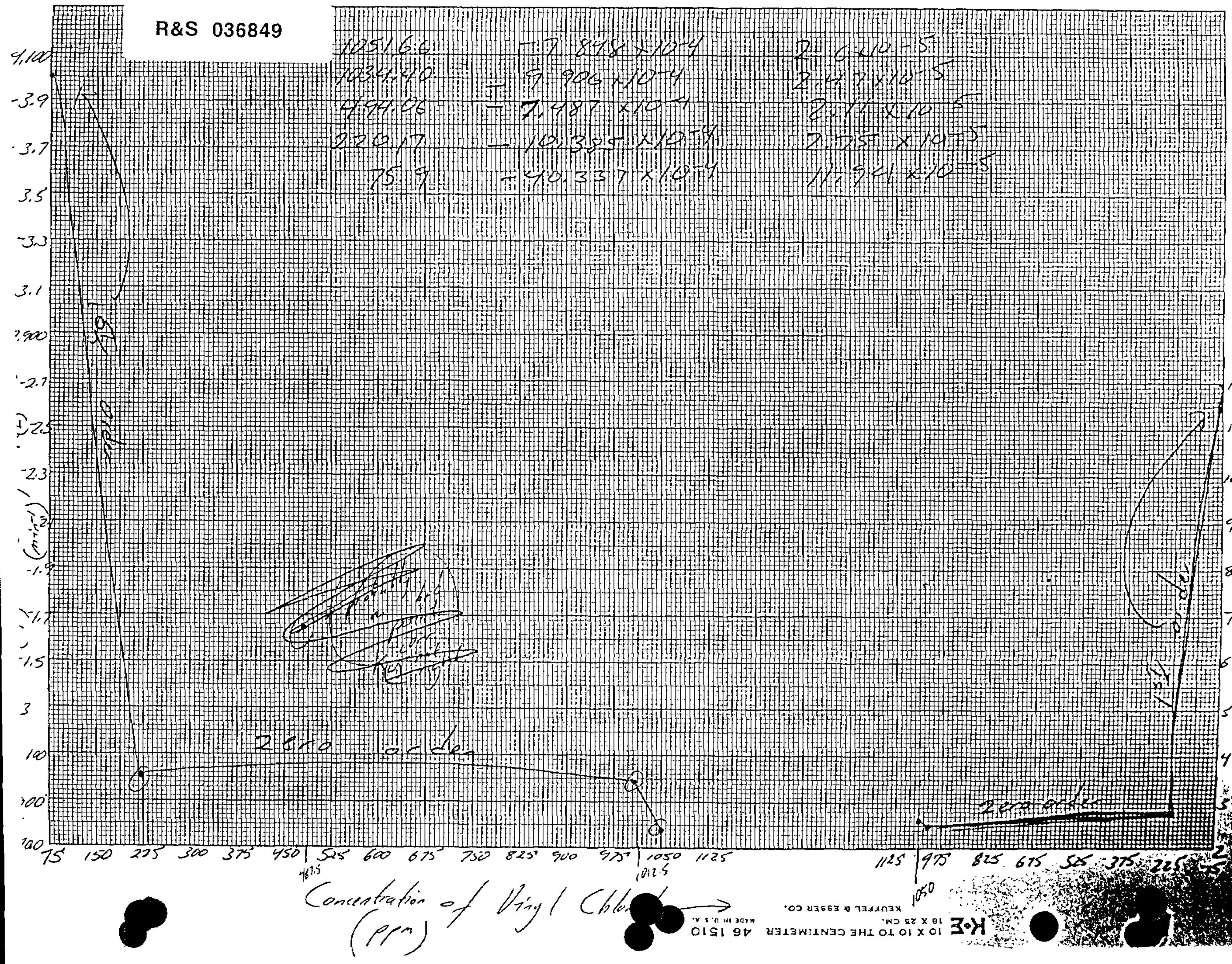
D.S. 1306

PV

7 of 8

56-6-01

R&S 036849


1051.66 — 7.848 x10-4 2.6 x10-5
1034.40 — 9.906 x10-4 2.47 x10-5
494.06 — 7.487 x10-4 2.11 x10-5
220.17 — 10.385 x10-4 2.75 x10-5
75.9 — 40.337 x10-4 11.941 x10-5
zero order
1st order
zero order
1st order
x 10-5
Concentration of Vinyl Chloride (ppm)
75 150 225 300 375 450 525 600 675 750 825 900 975 1050 1125
1125 975 825 675 525 375 225
12 11 10 9 8 7 6 5 4 3

PRINTED IN U.S.A. R2-68 THE DOW CHEMICAL COMPANY

SUBJECT

JOB NO.	SHEET OF	FILE	BY	DATE

ppm	K_L	O_2 consumption	K_L / O_2 cons
1051.66	-7.848×10^{-4}	30.12	2.6×10^{-5}
1034.40	-9.906×10^{-4}	40.00	2.47×10^{-5}
(473.97)	(-16.447×10^{-4})	(—)	(likely a bad point — $S(L)^2$ @ same $\bar{c}$)
220.17	10.385×10^{-4}	37.65	2.75×10^{-5}
75.9	-40.337×10^{-4}	33.78	11.94×10^{-5}
494.06	~~-6.477×10^{-4}~~	35.39	~~18.3×10^{-5}~~
	~~8.497×10^{-4}~~		

$\frac{6.477 \times 10^{-4}}{8.497 \times 10^{-4}} = c\,K_L = 2.9601 \times 10^{-3}$

$c\,K_L = 2.7581 \times 10^{-5}$ → $K_{L\,AVE} = 2.8591 \times 10^{-5}$

Measure O_2 Consumed

Run conc. curve $S(L)$ for $\bar{c} \cong 500$ ppm run same CO_2 buffer etc.

$K_L = 7.48' \times 10^{-5}$

Run 50 ppm conc. UC.

35.34

R&S 036850

t	%T	A	[c]
0	29.3	.5332	728.71
15	31.1	.5072	693.18
30	33.0	.4814	657.[illegible]
45	34.7	.4597	628
60	36.6	.4365	5[illegible]
75	38.0	.4203	[illegible]
90	39.8	.4002	

Y+= 559.1251
Y-= 524.5549
Y= 541.8400
90.0000

584.9524
559.0247
571.9886
75.0000

336.89 75.00
354.79 60.00
376.93 45.00
400.98 30.00
431.87 15.00
494.06 0.00

Y+= 695.662
Y-= 689.4986
692.0

80 90 100

100

CONTROLS CORPORATION BUFFALO, NEW YORK

R&S 036851

SUBJECT

3/18/74

650
815

10L
5.5L
4.5L consumed

~25 ml/min

t	% T	$A_{(x)}$	A (base)	$A_{(c)}$	ppm
0	58.5	.2326	.0178	.2148	148.57
7.5	64	.1939	↓	.1761	121.80
15	69	.1611		.1433	99.12
22.5	73	.1367		.1189	82.24
30	76.8	.1145		.0967	66.88
37.5	79.5	.0997		.0819	56.65
45	81.5	.0888		.0710	49.11
52.5	83.5	.0785		.0607	41.98
60	84.8	.0716		.0538	37.21
67.5	86.5	.0630		.0452	31.26
75.0	88.5	.0531		.0353	24.42

R&S 036852

51' SUBJECT

$\frac{5^{33}}{6^{30}}$ 55 min $\frac{12.0}{7.0}$ 5.2 $\frac{5000\,ml}{55\,min}$ = 90.91 ml/min

Empty

SHEET OF | FILE | BY | DATE

t	%T	A(u)	A(base)	A(c)	ppm
0	55.5	.2558	.0111	.2447	169.25
7.5	58.5	.2326	"	.2215	152.15
15	59.5	.2256	"	.2145	148.36
22.5	60.5	.2183	"	.2075	143.52
30	61.5	.2111	"	.2000	138.33
37.5	62.5	.2041	"	.1930	133.49
45	63.5	.1973	"	.1862	128.79
52.5	64.5	.1903	"	.1792	123.95
60	65.5	.1838	"	.1727	119.45

Grats

t	%T	A(u)	A(base)	A(c)	ppm
0	52	.2840	.0111	.2729	188.75
7.5	59	.2292	"	.2181	150.85
15	64.5	.1903	"	.1792	123.95
22.5	70	.1550	"	.1439	99.53
30	74.5	.1277	"	.1166	80.65
37.5	78	.1079	"	.0968	66.95
45	81	.0916	"	.0805	55.68
52.5	83.5	.0785	"	.0674	46.62

R&S 036853

PRINTED IN U.S.A. R2-68

THE DOW CHEMICAL COMPANY

SUBJECT

3/18/74

JOB NO.

ppm / 148.57

FILE

$$S_{(exp.)} = \frac{-9501.97157}{6187.5} = -1.53567$$

$$S_{(c)} \begin{cases} 169.25 \\ \frac{-2497.2726}{3375.0} = -.73993 \end{cases}$$

188.75

$$S_{(exp.)} = \frac{-6227.39996}{2362.5} = -2.63593$$

1.53567
.73993
-.79574

$S_{(c)}$ 2.63593
.73993
1.8960

R&S 036854

SUBJECT

5.6 $\frac{1}{3}$20

= 48.89 → O_2 consumed

4400 / 90

t	$S_{(L)}$ %T		A	ppm
0				
15	65.2	1.534	.1858	128.51
30	70.2	1.425	.1538	106.38
45	75.2	1.330	.1239	85.70
60	80.2	1.247	.0958	66.26
75	83.9	1.192	.0763	52.77
90	86.4	1.157	.0633	43.78
105	89.0	1.124	.0507	35.07
~~120~~	91.0	1.099	.0411	28.43

t	S(exp.)		A	C ppm
0	56.3	1.776	.2495	172.57
15	65.9	1.518	.1812	125.33
30	74.0	1.351	.1306	90.33
45	81.1	1.233	.0909	62.87
60	86.9	1.151	.0611	42.26
75	89.8	1.114	.0468	32.37

10.791 S(exp)
7.385 S(L)
3.4055 $\times 10^{-3}$ S(c)

0000
9997
.2855 11.4950

±.1778
97.74%

$$\frac{-.9495}{128.51} = S_{(L)} \quad 7.3865 \times 10^{-3}$$

$$\frac{-1.8622}{172.57} = S_{(exp.)} \quad 1.0791 \times 10$$

97.48% ±0.4825

R&S 036855

STOCK FORM C-4100
PRINTED IN U.S.A.

SUBJECT

JOB NO. | SHEET | FILE | BY

Empty CM

t	T%	A	C
0	81.5	.0888	61.42
7.5	82.5	.0835	57.75
15.0	83.4	.0789	54.57
22.5	83.6	.0778	53.81
30	84.0	.0759	52.50
37.5	84.2	.0749	51.81
45.0	84.5	.0730	50.14
52.5	84.8	.0716	49.52
60.0	85.0	.0708	48.97
67.5	85.3	.0690	47.72
75.0	85.8	.0668	46.20

(Sexp.) 10 L 1.00
6.2 L

t	T%	A	C
0	81.5	.0888	61.42
7.5	84.5	.0730	50.49
15.0	86.5	.0630	43.58
22.5	88.5	.0531	36.73
30	90.5	.0433	29.95
37.5	92.5	.0338	23.38
45.0	94.0	.0270	18.68

(Sexp) + pyrazole 10 L 3.00
5.5 L

0	80.5	.0941	65.09
7.5	82.3	.0845	58.45
15.0	83.1	.0802	55.47
22.5	84.2	.0749	51.81
30.0	85.0	.0708	48.97
37.5	85.2	.0690	47.40
45.0	86.0	.0656	45.06
52.5	86.3	.0641	44.34
60.0	86.9	.0611	42.26
67.5	87.4	.0584	40.39
75.0	88.0	.0554	38.32
82.5	[illegible]	.0542	37.99

R&S 036856