

Analytical Data of  
S-309, S-306 and S-307 Organic Phases  
(Kanegafuchi's No. 2 Plant)

Sampling date: Jan. 12, 1982

HCl feed rate: 6,300 STP m<sup>3</sup>/hr.

| Component                 | S-309  | S-306  | S-307  | Combined |
|---------------------------|--------|--------|--------|----------|
|                           | (wt.%) | (wt.%) | (wt.%) | (wt.%)   |
| Ethylene                  | 0.015  | 0.0008 | 0.0008 | 0.014    |
| Vinyl chloride            | 0.0028 | 0.0019 | 0.0069 | 0.0031   |
| Ethyl chloride            | 0.223  | 0.245  | 1.39   | 0.359    |
| Dichloroethylene (tr.)    | 0.0037 | 0.0039 | 0.015  | 0.0052   |
| Dichloroethylene (cis)    | 0.0027 | 0.0058 | 0.0026 | 0.0051   |
| 1,1-dichloroethane        | 0.0069 | 0.0065 | 0.019  | 0.0080   |
| Chloroform                | 0.015  | 0.014  | 0.030  | 0.016    |
| Carbon tetrachloride      | 0.028  | 0.018  | 0.028  | 0.032    |
| 1,1,2-trichloroethane     | 0.284  | 0.195  | 0.086  | 0.286    |
| 1,1,2,2-tetrachloroethane | 0.0075 | 0.0029 | 0.0005 | 0.0070   |
| Trichloroethylene         | 0.0060 | 0.0006 | 0.012  | 0.0039   |
| Perchloroethylene         | 0.0016 | 0.0016 | 0.0011 | 0.0017   |
| Chloral                   | 0.236  | 0.383  | 0.177  | 0.210    |
| Ethylene chlorohydrin     | 0.065  | 0.578  | 0.194  | 0.100    |
| 2,2-dichloroether         | 0.0013 | 0.116  | 0.016  | 0.011    |
| 1,1,1-trichloroethane     | 0.0086 | 0.0098 | trace  | 0.0089   |
| 1,2-dichloroethane        | 99.09  | 98.40  | 97.93  | 98.92    |

- Notes: (1) CO and CO<sub>2</sub> in vent gas from S-307: 0.25 and 0.39 mol %
- (2) HCl content in S-309 aqueous phase: 67 g/l
- (3) Catalysts: KOC-101 for R-301, KOC-R2 for R-302,  
KOC-R3 for R-303 and KOC-102 etc. for  
R-304
- (4) Acetylene in feed HCl: hydrogenated

Analytical Data of  
S-309, S-306 and S-307 Organic Phases  
(Kanegafuchi's No. 2 Plant)

Sampling date: May 7, 1982

HCl feed rate: 6,000 STP m<sup>3</sup>/hr.

| Component                 | S-309  | S-306  | S-307  | Combined |
|---------------------------|--------|--------|--------|----------|
|                           | (wt.%) | (wt.%) | (wt.%) | (wt.%)   |
| Ethylene                  | 0.028  | 0.0005 | 0.0004 | 0.020    |
| Vinyl chloride            | 0.0050 | 0.0024 | 0.016  | 0.0051   |
| Ethyl chloride            | 0.315  | 0.275  | 1.00   | 0.388    |
| Dichloroethylene (tr.)    | 0.0092 | 0.0073 | 0.026  | 0.0094   |
| Dichloroethylene (cis)    | 0.0085 | 0.0059 | 0.013  | 0.0077   |
| 1,1-dichloroethane        | 0.0093 | 0.0072 | 0.017  | 0.0090   |
| Chloroform                | 0.016  | 0.012  | 0.026  | 0.016    |
| Carbon tetrachloride      | 0.021  | trace  | 0.034  | 0.018    |
| 1,1,2-trichloroethane     | 0.308  | 0.249  | 0.089  | 0.306    |
| 1,1,2,2-tetrachloroethane | 0.011  | 0.0043 | 0.0011 | 0.0092   |
| Trichloroethylene         | 0.012  | 0.0011 | 0.0083 | 0.011    |
| Perchloroethylene         | 0.0023 | 0.0030 | 0.0020 | 0.0023   |
| Chloral                   | 0.267  | 0.549  | 0.208  | 0.258    |
| Ethylene chlorohydrin     | 0.064  | 0.408  | 0.144  | 0.091    |
| 2,2-dichloroether         | 0.0009 | 0.074  | 0.012  | 0.011    |
| 1,1,1-trichloroethane     | 0.0044 | 0.017  | 0.016  | 0.0075   |
| 1,2-dichloroethane        | 98.89  | 98.38  | 98.38  | 98.81    |

Notes: (1) CO and CO<sub>2</sub> in vent gas from S-307: 0.23 and 0.32 mol %

(2) HCl content in S-309 aqueous phase: 57 g/l

(3) Catalysts: KOC-101 for R-301, KOC-R2 for R-302,  
KOC-R3 for R-303 and KOC-102 etc. for  
R-304

(4) Acetylene in feed HCl: hydrogenated

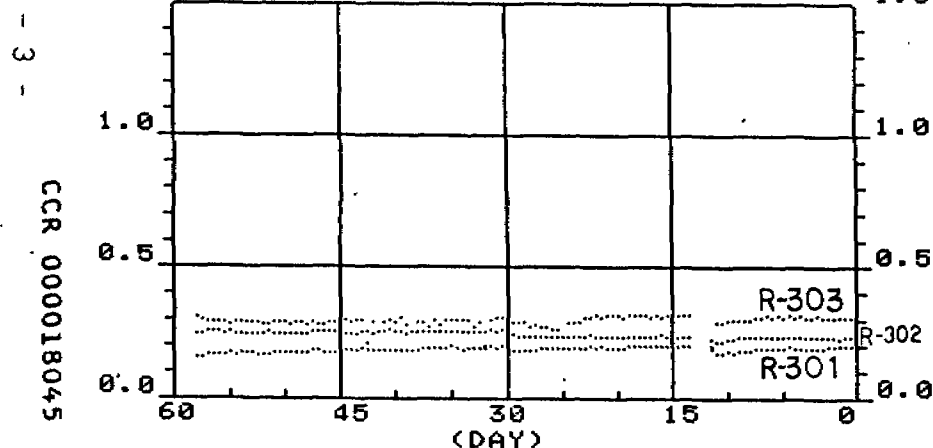
$\Delta P$

11-12-18:98 T-989-98 98981 N H+J PW-H

R98 \*P

82-11-18 11:16

\*\* NO.2-PLANT \*\* dp  
(K/G) OXY REACTOR 777 (301,302,303)



HCL FEED 7022 M3/H

REACTOR 777 (HCL 7000 M3/H 821)

$\Delta P$   
R-301 0.20 KG 0.00 KG/DAY  
R-302 0.24 0.00  
R-303 0.31 0.01

OXY dp  
777 2-PLANT 2-MONTH

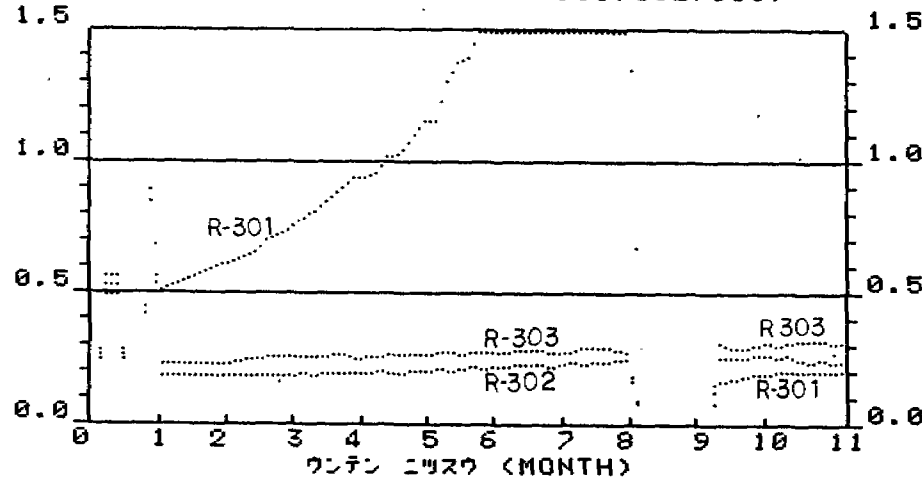
$\Delta P$

11-18 18:25 T-902-37 2P201 N H+Y PW-H

R22 0P

nob R22  
82-11-18 11:53

\*\* NO.2-PLANT \*\*  $\Delta P$   
(K/G) OXY REACTOR 777 (301,302,303)



START oct  
ワンテン カイシE" 81-10- 1  
UPPER LIMIT (HCL 7029 M3/H)  
1.5 KG/CM2

OXY  $\Delta P$  トレント" 2-PLANT トータル 11-MONTH

CCR 000018046