

INTER-OFFICE MEMO

TENNECO CHEMICALS, INC.

TO J.W. Poarch
FROM E. Young
SUBJECT Sodium Acetate Buffer pH Study
Analytical Number 2451

AT Burlington

AT Burlington

DATE July 25, 1975

COPY TO W.C. Champion
 F.W. Kanzler
 W. Miringoff
 W.E. Stewart
 ~~File~~

As per your request, a synthetic reactor mixture was buffered with increments of a 0.1M solution of sodium acetate. The following formulation was used in this study:

Demineralized Water	-	325.2 gms
Lauroyl Peroxide	-	0.26 gms
Gelatin - "A"	-	0.33 gms
Gelatin - "B"	-	0.33 gms
TCE	-	1.78 gms
MVAc	-	33.4 gms

Temperature = 135°F ± 5°F

After addition of lauroyl peroxide and the gelatins, the pH was recorded for twenty minutes. The TCE was then charged and the pH studied for ten minutes. The MVAc was then charged and the pH studied for five minutes. Then the sodium acetate solution was added. After each addition of sodium acetate solution, two minutes were allowed for equilibration of the solution. After the final addition, the pH was studied for an additional four minutes.

E. Young

Attachments (2)

EY/jst

PH STUDY

Addition of Lauroyl Peroxide
and Gelatins "A" & "B"

<u>Mean</u>	<u>pH</u>
1	4.88
2	4.88
3	4.88
4	4.86
5	4.86
6	4.85
7	4.85
8	4.85
9	4.85
10	4.84
11	4.85
12	4.86
13	4.86
14	4.88
15	4.88
16	4.88
17	4.88
18	4.89
19	4.89
20	4.90

Addition of TCE

<u>Mean</u>	<u>pH</u>
1	4.91
2	4.92
3	4.92
4	4.91
5	4.91
6	4.91
7	4.91
8	4.91
9	4.91
10	4.91

Addition of MVAc

<u>Mean</u>	<u>pH</u>
1	4.85
2	4.83
3	4.82
4	4.82
5	4.80

E. Young
7/25/75

SODIUM ACETATE BUFFER STUDY

<u>Sodium Acetate Solution, ml</u>	<u>pH</u>
1	5.58
2	5.75
3	5.83
4	5.88
5	5.91
6	5.92
8	5.99
10	6.02
12	6.06
14	6.08
16	6.10
20	6.18
25	6.21
30	6.24
35	6.28
40	6.29
50	6.32

1 ml $\approx$ 0.136 gms sodium acetate

After 50 mls Added

<u>Time</u>	<u>pH</u>
4 minutes	6.29
6 minutes	6.26

E. Young
7/25/75

COLORITE 010004