To: Mr Gerber 10/30/41

Concerning: Acid no. on Aroclors

Solid Aroclors - Method: Dissolve 10g sample in 100cc 50-50 benzene-ethanol. Add .5cc phenol red. Titrate to dark red. Subtract blank for solvent.

4465 - cc tetration of sample 1.95, 1.90, 1.90, 1.95

5460 cc for sample 2.75, 2.75, 2.70, 2.70, 2.70
(cc using new reagent) 2.60, 2.65
cc for blank 2.25, 2.20, 2.25
acid #: (2.65 - 2.25) .04 = .016
check on old method (phenolphalein) acid # = .0064

Liquid aroclor 1254 - Method: General Electric exactly.

blank	sample	acid #
2.20	2.70	.02
2.15	2.30	.006

Conclusions: (1) Data by the new method is more easily reproduced than by the old method.
(2) Higher value by new method may mean incomplete extraction of acid by water in old m[illegible]
(3) Neither new nor old method is sensitive enough to accurately detect acid in liquid aro[illegible]
(4) Considerable experience in observing color change of phenol red is necessary before close checks can be obtained due to gradations of color and fading end point

92 B Dunlap

DSW 330643

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Aroclor Meth...

Filtrate Lot #174	64 ppm.
East still receiver after blowing	40 ppm
" " " " " thru drier	23
From blending tank before adding earth	50
Same, blown in lab with wet air	120
Lot #175	
West still receiver - blown wet air	40
" " " " thru drier	28
Blending tank, no earth added	35
East still receiver - blown wet air	35
After filtering	52
Lot # 176	
West still receiver, blown thru drier	20
East " " " " "	12
From blending tank before earth added	42
" " " after " "	136 ± 10%
From filtrate receiver	60
Attapulgus earth, loss on heating	5.5 %
	6.0 %
From filter receiver after using earth 210° 6 hours. (allowed to cool before placing in tank)	57
Filtering thru new filter paper, before	84 (without ear
after	77
From filtrate tank after 1 hr low speed	73
1 hr med. speed	62
1 hr high speed	57
at end of filtering	42

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