

Monsanto

FROM (NAME & LOCATION) W. A. Krull, Krummrich

DATE December 1, 1971

SUBJECT AROCLOR DRUMMED QUALITY

REFERENCE

TO : R. M. McCutchan

file m. 3 1969 start of pigmented liner

cc: T. N. Carrico
W. C. Engman
J. R. Kuster
A. E. Leisy
O. N. Mueth
R. H. Munch
J. R. Savage

In May Tom Carrico sampled six Aroclor products in drums almost immediately after filling. These samples were analyzed by the old method for electrical properties and moisture content. Moisture seemed to be essentially unaffected. Electrical properties (using power factor @ 60 cy. and resistivity as indicators) showed degradation in all cases. At this time unknown to anyone, we were using a pigmented liner in the drums.

After switching to drums with an unpigmented liner, three products were sampled from drums in October in a manner similar to that used in the test above. Also samples were taken from the filling spout prior to filling the drums sampled. In every case, again using old method resistivity and power factor as indicators, no degradation was evident.

In November five drums of Aroclor 1016 were sampled for electrical properties immediately after filling. Samples were also taken from the filling spout prior to filling each drum. This time the electrical properties were analyzed using the laboratory clean room and the new method. These samples also showed no degradation of electrical properties.

The power factor and resistivity data are attached for all these tests. It shows that the change in linings has improved the drummed quality for at least a short period of time. It remains to be seen whether this quality will remain at a constant level over a period of time similar to normal storage conditions.

The test proposed by Research should give us an indication of this for our present clear lined drum as well as the new unlined drums. It should also give us a basis for making a decision on drum rinsing. Until all of the data are in, the project to modify the Dept. 246 drumming facility will be held.

Wayne A. Krull
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Technical Services Department

DSW 329167

/tm
att.

PIGMENTED LINING

<u>PRODUCT</u>	<u>SOURCE</u>	<u>OLD METHOD</u>	
		<u>RESISTIVITY</u>	<u>POWER FACTOR @ 60</u>
1242	Tank	14,800	1.00
	Drum	3,680	2.16
	Tank	5,100	1.98
	Drum	2,160	3.81
	Drum	2,320	2.46
1254	Tank	10,720	0.72
	Drum	4,800	0.99
	Tank	80,000	0.60
	Drum	6,200	1.37
54201 CM	Tank	2,250	1.74
	Drum	250	18.6
	Tank	2,170	2.09
	Drum	1,120	4.92
70-30	Tank	1,970	2.59
	Drum	580	9.60
	Tank	9,200	0.84
	Drum	3,520	2.31
1260 PPO	Tank	4,250	2.24
	Drum	790	5.53
	5 Gal.	800	4.20
	Tank	6,650	1.37
	Drum	580	5.23
A13B3B	Tank	2,450	2.37
	Drum	640	4.54
	Tank	1,240	2.31
	Drum	800	5.97

CLEAR LINING

1242	Tank	3,200	2.55
	Spout	4,160	2.04
	Drum	3,360	1.98
1254	Tank	11,050	0.67
	Spout	14,000	0.54
	Drum	12,000	0.59
70-30	Tank	1,200	3.93
	Drum	1,600	3.90
	Drum	1,680	3.39

1016 LOT KA-715

CLEAR LINING

NEW METHOD

<u>SOURCE</u>	<u>RESISTIVITY</u>	<u>POWER FACTOR @ 60</u>
Tank Car	172,600	0.378
Spout	55,200	0.276
Drum	106,100	0.414 (High)
Spout	42,500 (Low)	0.354
Drum	49,600	0.342
Spout	148,600	0.324
Drum	272,900 (High)	0.222
Spout	125,500	0.234
Drum	94,275	0.102 (Low)
Spout	85,600	0.246
Drum	99,100	0.180

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