Monsanto

FROM (NAME & LOCATION): B2SC P. G. Benignus

DATE: September 7, 1973

SUBJECT: General Electric Co. Hudson Falls, N.Y. Capacitor Fluids

REFERENCE:

TO: H. S. BERGEN

CC:
B2SL T. L. Gossage
B2SC C. Paton
E1SA W. H. Duffey
B2SL J. R. Savage
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T3A W. R. Richard
1650 P. L. Slayton
1650 J. G. Bryant

Gene Cox and Al Pozefsky (together) phoned today and asked a lot of questions which I answered. They also offered a number of suggestions which I will try to record without undue length.

Their initial questions were probes of characteristics and factors pertinent to PCB-type dielectrics and the attitudes of environmentalists and legislators toward PCB types.

Included were (briefly):

1) Has Monsanto developed more data about biodegradability?
2) Has Monsanto given additional data to the Government?
3) Could the higher boiling homologue content of 1016 be lowered without excessive cost?
4) Isn't the higher boiling homologue content of 1043 lower than in 1016?
5) Why does Monsanto not offer 1043 for across the board use in capacitors?
6) Wouldn't this be acceptable (in fact world-wide) as a non-PCB dielectric?
7) How would the economics compare?
8) What would the attitudes be regarding fire resistance?
9) G.E. said that Al Jennings of the EPA asked, "Why not use 1016 for all askarel transformer needs?"

All the foregoing is focused on the debatable questions - will there or will there not be further action or legislation against PCBs? As the answers to this are uncertain -- the foregoing seemed to me as preliminaries for G.E. to talk about DOP.

Or as they put it, "What does Monsanto want to do?" I said that we want to go on doing what we have been doing and we are not unhappy with this responsible position.

More specifically G.E. asked, "Does Monsanto want to supply DOP to G.E. and/or other capacitor makers?".

The following are some of the items covered relative to DOP:

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1) G.E.'s USP 3754173 issued 8/21/73 covering stabilized Ester Impregnant for capacitors.
2) G.E. will soon publish an article showing their good results with DOP.
3) G.E. agreed that evidently none of the other capacitor makers have been able (on their own) to make a good DOP capacitor.
4) G.E. emphasized again and again that what they really value is their life test and field test work and data with DOP that puts them at least one year ahead of their competitors and also Monsanto with our MCS 1475.
5) G.E. said they would be put back at least a year if they undertook the essential work to prove out the DK additive in our MCS 1475.
6) They said that at 34¢ the 6.2 DK of MCS 1475 is not worthwhile to G.E.
7) I asked again and again what MCS 1475 is worth to them and they refused to answer.
8) They asked how we made out with our round the circuit calls with MCS 1489 and 1475. I told them and pointed out that most of these people have not yet done much due to vacations but the one where we are getting worthwhile feed back indicate very favorable findings.
9) G.E. said that, "While MCS 1475 is of no interest to them this thing can, however, make Monsanto look like Santa Claus to all their competitors as they do not have DOP"!
10) G.E. asked, "What attitudes did I find from the various capacitor categories regarding our new dielectrics?" G.E. kindly gave me their own impressions, compared as follows:

Type Capacitors	Monsanto's MCS 1475	G.E.'s DOP
Large power correction	No interest	No interest
Motor-run (air conditioner)	No interest	Slight
Ballast	No interest	No interest
Electronic components	Interest	Interest

In this electronic components area the interest in a non-PCB dielectric is due to export activity by IBM and the 7 dwarfs and stems mainly from legislation by the Japanese.

However, as mentioned earlier, it is my impression that G.E. harbors the possibility of domestic legislation against PCBs as additional reason to go on with DOP.

Not only ourselves but G.E. who are well informed at the markets come up with essentially the same market analysis. These analyses show interest in the non-PCB ester types in only the limited electronic components area. Accordingly the demand for the ester type can't be very large.

I asked how many pounds are involved. Gene told me to call their purchasing people as he authorized them three or four weeks ago to contact Monsanto and also other suppliers of DOP.

After quite a long wait on the phone, I was told that it might be about one half million pounds but as they were not sure they would try later to send me copy of the letter they sent to suppliers of DOP.

Early August they routinely ordered from Monsanto plasticizer people a five-gallon sample of 2 ethyl hexylphthalate and requested prices. They never received prices but tested the five gallon sample and found it OK.

Only today Larry Barker and Bill Solberg (3 or more weeks later) telephoned Jim Bryant and asked for a price quote on electrical grade with stabilizer DOP. Jim replied that we do not have an electrical grade DOP with stabilizer (epoxide). However, if G.E. wants a non-PCB impregnant Monsanto has MCS 1475 at 34¢. Barker said this is too expensive but Solberg said it is not bad.

I told Larry Barker that his 0.5 M lb. estimate is good enough and he need not bother for more accurate data. In fact if the number was significantly different I would be greatly confused.

Yesterday I spent a long time on the phone answering Gene and Al's questions. This morning I was in need to ask them some questions. They were in Staff meeting with Luke Hart, but I asked that either Gene or Al be called to the phone. Gene answered my questions (except "What is 1475 worth?" He said, "We ought to be able to figure that out ourselves vs. DOP".)

Gene reiterated:

1) Is G.E. going to supply DOP impregnant to the industry?
2) Is Monsanto interested in being the supplier?
3) Is G.E. going to license Monsanto and/or the other capacitor makers?
4) Is Monsanto going to license re: MCS 1475?

Gene went on to say, "Paul, we have several large and important projects and programs on our hands that we must give our time and energy to". "Luke would like to get this thing with Monsanto settled and out of the way." "Have Mr. Bergen contact Luke and let Luke indicate whether he wants Monsanto to come up here or whether Luke would want to come to St. Louis with his people."

From this I gather that G.E. does not consider this thing as important as we do. I believe of more importance to G.E. are programs such as:

a) All PPL film for ballast with Aroclor 1016. This is moving along.
b) Get paper out of power capacitors to get an all PPL film with Aroclor 1016.
c) Get PPL or metallized film into air conditioner units, possibly dry -- certainly not Aroclor.

P. G. Benignus

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