W. S. Clark - General Offices

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AF → B. F. GOODRICH-AMERIPOL/
USE OF AROCLOR 6050 IN SBR

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During the call made at Ameripol with Guy Busch and Bill Papageorge on February 25, 1971, we discovered several items which are of interest to Monsanto. Let me just note them briefly in this memo as topics for future discussion.

1. Ameripol's product will be a "fire retarded" SBR resin to be used in industrial applications such as conveyor belts. It is not completely fire retarded by any means; it just doesn't burn as well as other SBR resins. It will be sold to formulators for further fire retarding and processing.

2. By selling pre-plasticized resin (Aroclor 6050 is the plasticizer), they are able to sell a much higher molecular weight polymer. This material, in the finished product, should provide much better tensile strength than a lower molecular weight material. Without plasticization, higher molecular weight SBR resins cannot be processed. This, then, is the key to their new product: a pre-plasticized resin which has better physical strength and which has better flame retardant characteristics than standard SBR resin. Ameripol considers this information very confidential.

3. For reasons of 1) cure rate, and 2) efficiency of plasticization, Santicizer 148 cannot be substituted for Aroclor 1221 in this system. The same goes for other phosphates.

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4. When talking about the unusual behavior which we observed when running their materials through our tunnel test, they stated that this was almost certainly the result of the Al_2O_3 3 H_2O which was present in the samples. This seems to make sense. They are working with this problem but don't yet have it solved.

5. Ameripol definitely considers the chlorine in Aroclor to be available chlorine. This also seems to make some sense. The aromatic C-Cl bond is very strong relative to the C-Cl bond in vinyl. Thus, aromatic chlorine in a vinyl system is relatively unavailable. In SBR, there is no other chlorine present so perhaps aromatic chlorine should be classified as available. On the other hand, this might be just one more case of the Aroclor acting as an inert filler.

6. Reviewed the compatibilizing effects of Santicizer 711 and Santicizer 148 on paraffin oils in SBR. This was received with interest though it has no particular application for the product being discussed at this time.

7. Discussions of ecological/toxicological questions relating to 6050 went well. These will be reported in more detail by Guy Busch.

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