

DATE February 14, 1969 cc. J. R. Fallon
 SUBJECT INQUIRY FROM VAPOR CORPORATION R. A. Garcia - AKRON
 OF TOXIC EFFECT OF CHLORINATED S. Shaw
 BIPHENYL
 TO J. J. Roder - CHICAGO

Stan forwarded to me the note you received from Ed Gustaf and the accompanying letter from T. Fujiwara, Managing Director, Nipon Vapor Generator Company, and to H. J. Schickedanz, General Manager, Vapor International. We have been advised by our Japanese representatives of the bran oil poisoning of quite a number of Japanese citizens that was attributed to Kaneclor 400 (chlorinated biphenyl comparable to FR-2).

We assembled both medical and application data and sent it to our Japanese counter-parts as arguments for the safe use of chlorinated biphenyl heat transfer fluid. Essentially, we said that there are certain toxic and systemic effects that can be brought about by the vapors of chlorinated biphenyls. We did not rule specifically on the ingestion limits of this chemical. We also directed attention to the large number of applications in food processing that utilize Therminol FR heat transfer fluid. We brought out very strongly the fact that these systems have been designed to minimize accidental contamination of food products with chlorinated biphenyls.

I think we have a good track record here in the States using Therminol FR in these applications. However, it only seems a matter of time until the regulatory agencies will be looking down our throats regarding the use of this material. Possibly, by the time this comes about, we will have completed feeding studies with chlorinated biphenyls that will allow us more exact data than has been available in the past. As a matter of fact, they're feeding this stuff to chickens now, but I have no specific results of these tests. I can only suggest that you attempt to put Gustaf's mind at ease regarding the "toxic" aspects of these chlorinated biphenyls by playing down the medical reports and playing up proper system design.

Look at the bright side for us in the heat transfer fluid end of our business -- if the government closes us down on the use of chlorinated biphenyls, we have two excellent fluids in Therminol 55 and Therminol 66, as well as, a proprietary fluid in Therminol 77 to exploit. Therminol 66 will certainly be available in Japan according to recent information from our Engineering Department.

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A final caution Jim, please use the attached information with some discretion. I certainly would not pass completed sets of this data to those asking the questions, but rather extract the essential points from this data, namely, the ruling on vapor limits as handed down by the Industrial Hygienist Association, and a strong play on proper system design to prevent accidental contamination of food products and processing material by chlorinated biphenyls.

Don Roush

Don Roush

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