

Monsanto

TO: E. R. Rieberg - Research Center

DATE: January 11, 1971 cc R. E. Keller - S. Ondre
R. M. Kountz - Bloom
J. R. Savage - JSAAV

SUBJECT: AROCLOR - MCS 1016

REFERENCE:

TO: R. H. Munch / E. S. Tucker

I received another letter from Al Posefsky reiterating his concern on 1) biodegradability of MCS 1016 (he wants rate data) and 2) keeping the U.L. rating and fire resistance.

Ralph told me that in order to restore the full Aroclor 1242 chlorine content we would have to cut into 17% of the product eliminating some of the 2,4'-dichlorobiphenyl, which we don't want to do.

It seems we should try to make the best of the situation; calculate a position which restores part of the chlorine level and which makes economic sense. We showed some reasonable fire resistance in isomerized Aroclor 1239 and 1240 in trying to reach a new transformer fluid in the work done by Jim Sullivan. I believe it was MCS 717 and MCS 762.

Maybe we should just take a look at the fire resistance of MCS 1016; do some experimental work on MCS 1016 vs. a "partly restored C1 fluid 1240" vs. Aroclor 1242.

The biodegradation rate has to be clarified in our own minds and in the eyes of the industry. I think this has to be put in the context of what isomers are degrading in:

rats
fish
chickens
cow's milk
river water
activated sludge
C₂ cultures

and which isomers are not degrading, even though the rates are low. MCS 1016 needs to be put in this context. We also need to give some indication of at least C₂ culture rate data with and without biphenyl.

Light degradation - This information from Bloomfield needs to be brought together.

MONS 098683

Will Ralph please lead the reevaluation of the chlorine and FR level and will Scott and Ralph put the story together on biodegradation.

Thanks.

WR,

W. R. Richard

/is