Monsanto

FROM (NAME & LOCATION) R. H. Munch - Organic/Technology - South Second Street

DATE : June 23, 1971

SUBJECT : MCS 1112

REFERENCE :

TO : W. R. Richard
T-380

cc: T. L. Gossage - B-283-S
J. R. Fallon - B-2-S
P. G. Benignus B-2-S
R. A. Baxter - Ruabon
C. R. Coleman - Ruabon
P. J. A. Marsh - Brussels
J. R. Savage - B-228-N
J. C. Wygant/Q. E. Thompson - T-3

The Doble Engineering Co. report on MCS 1112 indicates that our material is not suitable for use as a cable oil or transformer fluid because its acidity and power factor increase at rates much greater than are permissible during the oxidation test. The viscosity is also higher than would be desirable.

If we are to go further with this project it will be necessary for us to develop a means for removing the oxidatively unstable components if they are minor impurities or to find an effective oxidation inhibitor.

This will require that we set up equipment to do the oxidation test according to ASTM D-1904 so that we can test purification methods and inhibitors. Equipment for this is not now available within the company laboratories. This would cost about $1,000 and require two weeks to a month to be ready to operate. The experimental work might require about two man-months. It is quite possible that the hindered phenol or amine type antioxidants would make our product stable enough to oxidation to be useful.

Use of MCS 1071 instead of MCS 1112 (50:50 MCS 1071 and 1072) might be desirable to achieve lower viscosity.

Doble Engineering has asked if we would permit them to discuss the results they have obtained with their clients. They want to do this not to promote its use but to keep their clients abreast of all data on different types of available fluids. They could not recommend MCS 1112 unless we remedy the oxidative stability problem.

They have recommended that Paul Benignus and I visit their laboratories to discuss this problem instead of having one of their men come here because we could then talk with all their staff and get much broader advice on this type of product. Such discussions should be very valuable to us by helping us understand the technical requirements as well as the marketing requirements in this field.

R. H. Munch

DSW 201708

js

IN-10 REV. 11-65

STLCOPCB4059775